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In the Supreme Court of the United States

OCTOBER TERM, 1969

No. 31, Original

STATE OF UTAH, PLAINTIFF

v.

UNITED STATES OF AMERICA

ON BILL OF COMPLAINT
(BEFORE THE SPECIAL MASTER ON REFERENCE)

BRIEF OF THE UNITED STATES WITH RESPECT TO THE NAVIGABILITY OF THE GREAT SALT LAKE

INTRODUCTION

The only question now before the Special Master is whether or not the Great Salt Lake is navigable. The State of Utah contends that it is; the United States contends that it is not. Should we prevail on this issue that would be an end of the case, since the sole basis of Utah's claim to the lands in dispute, whether now submerged or exposed, is that they were once part of the bed of a *navigable* body of water and, as such, passed to the State upon Utah's admission to the Union. On the other hand, if Utah prevails on the question of navigability, further proceedings will be necessary to determine other issues, notably whether

the State lost its original title by operation of the law of "reliction" as portions of the former lake bed became exposed.[1]

Two propositions set the framework for the consideration of the navigability of the Great Salt Lake. The first is that the burden of proof is on the proponent of navigability—here Utah. See *Harrison* v. *Fite,* 148 Fed. 781, 785 (C.A. 8); *Iowa-Wisconsin Bridge Company* v. *United States,* 84 F. Supp. 852, 867 (C. Cls.). The second proposition is that "[n]avigability, when asserted as the basis of a right arising under the Constitution of the United States, is necessarily a question of federal law to be determined according to the general rule recognized and applied in the federal courts." *United States* v. *Holt Bank,* 270 U.S. 49, 55–56; *Brewer-Elliott Oil and Gas Co.* v. *United States,* 260 U.S. 77, 87; *United States* v. *Utah,* 283 U.S. 64, 75; *United States* v. *Oregon,* 295 U.S. 1, 14. It follows that the decisions of the Supreme Court of Utah taking judicial notice of the navigability of Great Salt Lake,[2] cannot be deemed to have established the Lake's navigability for our purposes. The question is, rather, whether the State of Utah, in the recent proceedings before the Special Master, has succeeded in showing that Great Salt Lake is a navi-

[1] As we read Utah's brief (pp. 1–4), there is no dispute between the parties on this point. The State's insistence (Br. p. 2.) that navigability is a "preliminary" issue, not a "basic" one, is presumably no more than an assertion that it must prevail on this question.

[2] *Robinson* v. *Thomas,* 75 Utah 446, 286 Pac. 625; *Deseret Livestock Co.* v. *State,* 110 Utah 239, 171 P. 2d 401.

gable body of water according to the rules recognized and applied in federal courts.

We turn first to those governing legal standards, concluding, in sum, that navigability as a basis for a State claim to submerged lands requires a finding that the body of water was used, or at least useable, at statehood as a commercial highway. We then undertake a detailed canvas of the evidence presented at the hearing. The historical materials, we find, reveal very little actual navigation of the Lake and none of the relevant kind at the critical time. Finally, we deal with the suggestion that the Great Salt Lake was, and is, *potentially* an artery of commerce.

GOVERNING LEGAL PRINCIPLES

At the outset, it may be useful to restate how the issue of navigability arises in the case. Utah's claim to the original bed of the Great Salt Lake (whether now submerged or exposed) ultimately rests upon the proposition that these lands passed to the State upon its admission to the Union. This results, it is said, from the operation of the "equal footing" principle which, as construed in *Pollard's Lessee* v. *Hagan*, 3 How. 212, and subsequent cases, requires that the newly admitted States be accorded the same property interest in submerged lands as was enjoyed by the thirteen original States as successors to the rights of the British Crown. And so we are finally led to the English law which viewed the beds of the great navigable rivers of the realm as belonging to the sovereign, rather than to the riparian landowners.

The governing notion apparently was that the principal highways of water commerce—which in England are the tidal rivers—ought to be treated as public assets, immune from the claims of private landowners. That rationale is, of course, equally applicable in this country. It is merely an anomaly of our constitutional history that, here, the public interest in navigable waters, as such, is administered by the federal government (to which the Constitution delegates admiralty and maritime jurisdiction and power to regulate interstate and foreign commerce), while the public interest in excluding the riparian owners from the underlying lands is manifested in State custody of the beds (because the original States, rather than the Union, immediately succeeded to the sovereign prerogatives of the British Crown and never ceded their rights in the water bottoms to the national government, see *Martin* v. *Waddell,* 16 Pet. 367, 410, 416). The fact that, in the United States, one sovereign regulates navigation and another owns the beds does not suggest different tests as to what constitutes a "public" river. On the contrary, since the overriding reason for keeping the beds out of private ownership is to prevent interference with the free use of navigable waters as commercial highways, see *Barney* v. *Keokuk,* 94 U.S. 324, 338, one would suppose that a State claim to submerged lands should attach only with respect to the beds of rivers or lakes the waters of which are subject to the federal navigational servitude.

That would certainly be the rule if the English example had been followed strictly. For the common law conceded to the Crown only the beds of navigable *tidal* waters, which were of course arms of the sea subject to the jurisdiction of the Admiralty and arteries of foreign commerce. To be sure, this equation of navigability with tide-water was early found ill-suited to the geography of America and rejected, both as a restriction on the federal admiralty jurisdiction (see *The Propeller Genesee Chief,* 12 How. 443, 454–459), and as a test of navigability for property purposes as well (*Barney* v. *Keokuk, supra,* 94 U.S. at 337–338). But the single federal standard that seemed to emerge was, in the words of the *Genesee Chief,* waters "on which commerce is carried on between different states or nations."

In light of this history underlying State ownership of the beds of the navigable waters, the question arises whether the rule is operative with respect to lands under rivers or lakes which are not within the federal admiralty jurisdiction or subjected to federal regulation under the Commerce Clause because they do not form part of a navigable interstate or international commercial highway—and are, accordingly, not "navigable waters of the United States." See *The Daniel Ball,* 10 Wall. 557, 563; *The Montello,* 11 Wall. 411, 415; *Moore* v. *American Transportation Company,* 24 How. 1, 39; 33 U.S.C. 2.10–5(a). Although there is of course no constitutional obstacle to recognizing State ownership of the beds of wholly land-locked intrastate waters, confining the doctrine to channels of interstate

or foreign commerce would serve the advantages of a single uniform federal test of navigability which, in practice, would allow public ownership under all important water highways. If the matter were open, we might invoke that limitation here, since the Great Salt Lake has no navigable connection beyond Utah. However, because we read the opinions in *United States* v. *Utah, supra,* 283 U.S. at 75, and *United States* v. *Oregon, supra,* 295 U.S. at 14, as foreclosing the argument, at this juncture, we merely preserve the point in the event it seems appropriate to urge reconsideration of the *Utah* and *Oregon* decisions when the Special Master's report is before the Court.

We now turn to the test of navigability on the assumption that an interstate connection is *not* essential for present purposes. The classic definition of navigable waters occurs in *The Daniel Ball, supra,* 10 Wall. at 563:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary conditions, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. * * *

Although that was a case construing the Commerce Clause, the definition just quoted is almost invariably cited in both admiralty cases (*e.g., In re Garnett,* 141 U.S. 1, 15), and cases involving State title (*e.g., United States* v. *Utah, supra,* 283 U.S. at 76). Like Utah (see Br. 8–10), we accept the passage as generally stating the applicable law.

What *The Daniel Ball* teaches is that navigability in fact, in federal law, is more than ability to float a vessel. A body of water is navigable in fact only if, in its natural condition, it is useable as a "commercial highway." The last expression carries several relevant implications:

> That the movement is a purposeful aspect of the flow of goods or passengers from one point to another, rather than, say, the aimless cruising of pleasure boats or even the scheduled round trips of a sightseeing or excursion vessel;
>
> That the commerce involved is, at least potentially, of substantial volume and frequency;
>
> That the use of the body of water for transporting goods or people is practical, including, presumably, physical possibility and economic feasibility.

These characteristics have been listed as ingredients of navigability in all contexts. But, whatever the appropriateness of demanding so much to establish admiralty jurisdiction, or congressional power under the Commerce Clause, it is clear that these are the enduring criteria of navigability in connection with determining a State claim to the bed of an inland lake or river. Thus, a navigable body of water in this sense has been defined as a waterway which has "capacity for practical and beneficial use in commerce" (*Oklahoma* v. *Texas*, 258 U.S. 574, 591), or, more directly, as "a channel for useful commerce." *Brewer-Elliott Oil and Gas Co.* v. *United States, supra*, 260 U.S. at 86; *United States* v. *Holt Bank, supra*, 270 U.S. at 56; *United States* v. *Utah, supra*, 283 U.S. at 76. The matter is well summed up in the landmark opinion

of Judge Hook in *Harrison* v. *Fite*, 148 Fed. 781, 783 (C.A. 8), approvingly cited by the Supreme Court in several decisions (*e.g.*, *Oklahoma* v. *Texas*, *supra*, 258 U.S. at 591; *United States* v. *Oregon*, *supra*, 295 U.S. at 23):

> To meet the test of navigability as understood in the American law a water course should be susceptible of use for purposes of commerce or possess a capacity for valuable floatage in the transportation to market of the products of the country through which it runs. It should be of practical usefulness to the public as a public highway in its natural state and without the aid of artificial means. A theoretical or potential navigability, or one that is temporary, precarious, and unprofitable, is not sufficient. While the navigable quality of a water course need not be continuous, yet it should continue long enough to be useful and valuable in transportation; and the fluctuations should come regularly with the seasons, so that the period of navigability may be depended upon. Mere depth of water, without profitable utility, will not render a water course navigable in the legal sense, so as to subject it to public servitude, nor will the fact that it is sufficient for pleasure boating or to enable hunters or fishermen to float their skiffs or canoes. To be navigable, a water course must have a useful capacity as a public highway of transportation. * * *

It only remains to stress one aspect of the test of navigability which is unique to the State title context: that is the *time* when the water course must be navigable. The time is *not* the present, as it is for the pur-

pose of admiralty jurisdiction. See *The Robert W. Parsons,* 191 U.S. 17, 28. Nor may we follow the generous test applicable to the exercise of congressional powers under the Commerce Clause, which treats as subject to regulation waters which were once navigable but are no longer (*e.g., Economy Light Co.* v. *United States,* 256 U.S. 113, 123–124), or which only recently have become passable (*e.g., Philadelphia Light Co.* v. *Stimson,* 223 U.S. 605, 634–635), and, also, streams which are not now, and never have been, navigable, but may become so in the future by improvements (*e.g., U.S.* v. *Appalachian Power Co.,* 311 U.S. 377, 409; and see 33 U.S.C. 2.10–5). For the purpose of determining a State claim to water bottoms the inquiry as to navigability is limited to the date of the State's admission to the Union; all else is irrelevant. *Shively* v. *Bowlby,* 152 U.S. 1, 18, 26; *United States* v. *Utah, supra,* 283 U.S. at 75; *United States* v. *Oregon, supra,* 295 U.S. at 14; *Oklahoma* v. *Texas, supra,* 258 U.S. at 591, 594; see *United States* v. *Appalachian Power Co., supra,* 311 U.S. at 408.

An important corollary of the rule that navigability must be shown at Statehood, not at some future time, is that the water course should be judged in its natural state. Future improvements that would remove obstacles to commerce or otherwise improve navigability are not relevant.

This is not to say that actual use of the river or lake as an artery of commerce at the date of the State's admission is essential. As *United States* v. *Utah, supra,* 283 U.S. at 82, explained: "where con-

ditions of exploration and settlement explain the infrequency or limited nature of such use, the susceptibility to use as a highway of commerce may still be satisfactorily proved." Thus, one may judge navigability by assuming a natural development of the area and considering whether the stream or lake, given its geographic setting, its dimensions and direction, will likely become a commercial highway. But, the potential of a water course as an artery of commerce may be obviously lacking from the beginning, despite its ability to float a large vessel. And subsequent history will often be relevant in confirming that appraisal.

ACTUAL NAVIGATION ON THE LAKE

In an appendix to this brief (App. 2, *infra*, pp. 43–59)[3] we have detailed every known instance of navigation on the Great Salt Lake.[4] We submit that a careful analysis of this history shows that the Lake never served as a commercial highway, certainly not since Statehood. We turn to that demonstration.

The evidence relative to boats plying the Lake reveals uses in seven categories: (1) pleasure; (2) ex-

[3] An abbreviated, but complete, listing in tabular form follows the narrative. App. 3, *infra*, pp. 60–63.

[4] Two boats referred to in the evidence are not listed: these are the "Rosie Brown," built by Thomas G. Brown, and named for his daughter, and the "LaVon," built by T. G. Brown, the son of Thomas Brown. The "Rosie Brown" was used to "haul salt from beds somewhere along the [Bear] river to the railroad at Corrine"; the "LaVon," was "a motor launch capable of carrying 25 passengers at a time, and used for pleasure cruises and hunting trips." Both boats are omitted because they seem to have been used only on the Bear River. The evidence does not reveal when these boats were used. Ex. D–3, p. 270.

cursions; (3) the hauling of sheep and cattle; (4) the construction of railroad lines across the lake; (5) surveys, explorations, and scientific studies; (6) commercial trade and (7) miscellaneous. In addition, the evidence reveals only the existence, but not the use, of a number of boats, and these may be assigned to an eighth category, that of "use unknown." [5]

1. The first category, that of pleasure boats, contains the greatest number of vessels. Undoubtedly, such boats as may have been on the Lake and which are not referred to in the evidence introduced in this case would be rowboats, sailboats and gasoline launches falling into this category. And the boats only generally referred to—the forty yachts mentioned in Item 60, the unknown number of boats which participated in the regatta mentioned in Item 73—all of these appear to have been private craft used solely for recreation and pleasure.

It should here be noted that (with perhaps one exception mentioned later) the only boats using the Salt Lake County Boat Harbor pictured in Exhibit P–11, and occasionally referred to at the hearing, were pleasure boats. The harbor was not built until the 1930's and in 1949, only about ten years after its completion, was found to have been neglected, "and not satisfactory for the 50 boats moored there." Ex. D–4, Item 00, pp. 7 and 8. This finding was made by the United States Army Corps of Engineers, which at the direction of Congress was conducting a study to de-

[5] Appendix 4, *infra*, p. 64, is a table indicating into which category the defendant believes should be placed each of the instances listed in Appendices 3 and 4.

termine whether or not the Government should participate in a project to improve the harbor. The final recommendation of the Corps was that improvements should not be undertaken.

Ten years later the harbor was again inspected by an agent of the federal government, this time in connection with a proposal that Great Salt Lake be made a national monument. According to this report, conditions there had deteriorated (Ex. D–4, Item D, pp. 6 and 7):

> Located a mile or so east of Sunset Beach, this harbor is apparently operated by Salt Lake County. It is certainly the largest, and possibly the only, harbor on the lake developed for the use of private pleasure boats. The harbor consists of a small dredged channel with dilapidated boat shelters along one side. The silting in this channel causes a serious maintenance problem. At the time of our visit a scoop was in operation cleaning out muck clogging the channel entrance.
>
> The harbor facilities presented the same general appearance of decay noted elsewhere. About 30 boats, ranging from rowboats to large cabin cruisers, were tied up in the boat sheds. Some of the boats were complete wrecks. All showed the ravages of erosion caused by the high salt content of the Great Salt Lake waters. The boat houses and other structures are complete shacks, almost beyond repair. The only exception was the boat house belonging either to the U.S. Navy or Coast Guard.
>
> If this harbor is any indication, Great Salt Lake is not a popular boating area. Further

> evidence of this is the fact that no boat of any kind was seen on the lake during the entire study.

The lack of pleasure boats on the Lake was not a phenomenon confined to 1959; in 1902, in a geography book apparently designed to be used in the Utah public school system, the statement is made of Great Salt Lake that (Ex. D–3, p. 127):

> Though the air is very invigorating and healthful on account of the salt spray, there is very little sailing upon the lake because of the unpleasant effect of the salt which crystallizes upon the body and clothes in thick scales from every drop of water which strikes them. Salt water soon destroys leather and rubber and causes disagreeable cracks in the skin, when it is not washed off by fresh water. The waves are very heavy and roll lazily even in severe storms.

But these comments on the harbor are a digression: even were the harbor in excellent condition, and used by a fleet of 500 pleasure craft, that use for that purpose would not under federal law permit a determination that the Lake is navigable for the purposes of vesting in the State title to the bed thereof.

2. The second category is of boats used for excursions: thirteen boats devoted to this activity have been identified in the evidence. The excursion trips appear for the most part to have lasted from twenty minutes to three hours, but sometimes boats were hired for tours of longer duration.

Obviously, to be a highway of trade and travel, a body of water ought to lead somewhere, and lend itself to being used by traffic to get from one end to the

other. A boat which ventures forth on a 2,000 square mile body of water for twenty minutes, and then without having in the interim discharged freight or passengers, returns to the place from which it started, cannot be said to have been engaged in "useful commerce", or to have demonstrated the Lake's "useful capacity as a public highway of transportation." If the existence on a body of water of excursion boats, or any boats hired for pleasure, could be construed to establish the navigability of that body of water, then the Lake in the Public Garden in Boston, plied regularly in the summer by a fleet of swan boats, would be a navigable body of water, as would countless other small ponds in parks throughout the country.

3. The third category is of boats used to haul cattle and sheep. Nine such boats can be identified in the evidence; in every case save one where there is information on the subject, however, it appears that the boats used to haul the sheep and cattle were the property of the owner of the stock, and that the hauling was done, not by a carrier for the purpose of making money by the act of carriage, but by a person or organization whose business was ranching and for whom the carriage of the stock to the mainland from either Antelope or Fremont island was only one step in an operation not centering on the use of the Lake as a highway for trade and travel in their customary modes on water. In other words, the business of the boats was ranching, not carrying waterborne freight; the boats were sustained on the Lake from the proceeds of the ranching operation, not from their profits as carriers.

This may, perhaps, be deemed an unimportant distinction; it could be argued that whether a boat used to haul stock is owned by the rancher himself, or by some party whose business it is to haul stock, makes no difference. But, there is, we suggest a critical distinction. The actual situation is that the carriage described served the needs only of the limited number of people who owned ranching operations along the shores of the Lake (and, indeed, the evidence shows that, in the entire history of the Lake, the only ranching operations which have used boats have been those of four or five people or organizations[6]—who have used Fremont or Antelope Island for grazing their sheep or cattle). This, we submit, hardly demonstrates that the lake has a "practical usefulness to the public as a public highway."

What is true of the boats which were apparently owned by the ranchers themselves is also true of the one boat used to haul stock that was not owned by a rancher: this was Mr. Backman's boat which was used—and presumably especially hired for this—to carry sheep to Fremont Island for the owners of that island. One sheep boat for hire does not make an artery of commerce; especially if it was only hired by one person—the owner of Fremont Island—and was useful only in one activity—the hauling of sheep to and from that island.

[6] These are, on Fremont Island, the Millers (up to 1884) and the Wenners (from 1884 on); on Antelope Island, the Mormon Church, originally, then (apparently) White and Sons, and finally, the Island Improvement or Island Ranching Company, which, in 1967, sold its land to the State of Utah.

4. What has been said of the inability of the limited use of boats for hauling stock to show the "practical usefulness" of the Lake to the public as a commercial highway applies with even more force to the fleets of boats which twice came on the lake, not to engage in trade or travel, but to construct across its waters first, in 1902, a railroad trestle, and then in 1957, a solid landfill causeway. While on the lake, these vessels were not instruments of commerce in the customary modes of trade or travel on water; they were construction equipment. After their work was completed, the steamboats, tugboats and barges, aside from a few craft which continued to be used for regular inspection checks of the trestle and causeway, all left the lake, for there was no traffic or other activity on the lake requiring their presence.

5. The fifth category, which consists of boats used to explore the Lake, or of boats which once were or now are engaged in scientific study on its waters, no more are indicative or probative of the utility of the lake for trade or travel than are the Apollo expeditions to the moon proof of the existence today of interplanetary commerce.

6. The sixth category consists of boats which appear in fact to have used the lake as a highway for commerce in the customary mode of trade and travel on water.

There are seven such boats: the first was the "Timely Gull" (Item 7), which was on the lake from 1854 to 1858, and appears to have been used not only

to haul church cattle to and from Antelope Island, but also to carry and trade in cedar, salt, and slate flagging.

The next two boats, the "Pioneer" (Item 15) and the "Kate Connor" (Item 16) both belonged to General Patrick Connor, and were both used in 1867 and 1868 to transport railroad ties from the mountains south of the lake eighty-five miles to where the Union Pacific Railroad was being built on the north of the lake, "where there was no timber (nor, in fact, anything else)." Ex. P–8, p. 17. How long the "Pioneer" was thus used is not known (although the railroad, of course, was completed in 1869), nor is anything known of its ultimate fate. The "Kate Connor" was not a financial success. Ex. P–8, p. 17. Although there is a reference to the "Kate Connor's" having sunk with a load of ore in about 1871 (Ex. P–8, p. 18B; Ex. D–3; p. 192), the journal of Christopher Layton reveals that the boat was bought by him in 1872 and used for a number of years thereafter for hauling sheep to Antelope Island for the church. Ex. D–3, p. 69. The "Kate Connor," therefore, has either been confused with some other boat which did sink, or after sinking, was raised and restored to use. Like the "Pioneer," its end is unknown; Alfred Lambourne, on Gunnison Island in 1895, mused on a piece of wreckage cast up on the shore and used for firewood (Ex. D–3, p. 140):

> Perhaps the relic that fed our flames was a bit of the old *Pioneer,* or it may have come from the *Star of the West.* Maybe it was a piece

from the ribs of the *Kate Connor,* whose skeleton lay for several years at one of the river mouths; or it may have come from the Stanbury scow, the *Salicornia;* or from the *Pluribustah,* or other boat with equally *un*euphonious name.

The next use of the lake as a highway for trade or travel also involved the transportation of railroad ties to the site of the construction of the railroad. The ties, however, were not carried in a boat; rather, lashed together, the ties constituted a raft (Item 18 in our list of boats). Given its purpose, this raft of ties crossed the Lake only once, of course, and it was never followed by a second. Ex. D–3, p. 191.

This brings us to the most famous boat ever on the lake, the "City of Corinne" (Item 19). It was launched in June, 1871, and was intended to be used for carrying passengers and freight, but its life in this capacity was less than one year. By June 1872, it had been converted into an excursion boat. In 1881, it was moored permanently at Garfield Landing, and was used as a hotel.

The last two boats which were used to any extent for trade and travel were both used by the Miller family: The "Lady of the Lake" (Item 32) in the 1880's, in addition to hauling sheep to and from Fremont Island, was used for hauling ore, salt and cedar posts. Its use by the Millers ceased well before 1891. Another boat (Item 34) built and used by the Millers carried salt from various salt works around the lake to a railroad connection. The exact dates of this use are unknown; it was probably in the 1880's.

These seven boats comprise the lake's entire commercial fleet, and the first five, at least, were in use for purposes of trade and travel for very brief periods of time. Only one of them, the "City of Corinne" had regularly scheduled passenger and freight service across the lake, and this service lasted for less than a year.

7. The seventh category is of boats devoted to miscellaneous uses: the rowboat (Item 9) which took Brigham Young to Antelope Island in 1856, while the team "forded the water to the island"; the "Star of the West" (Item 15) which once carried a "cargo of Salt," and which another time was used to supply water to a party surveying the lake, it having "no other known claim to fame," (Ex. D–3, p. 187); the four boats (Item 61) which in 1935 searched for a plane downed on the lake, and one of which was thereafter given to the Salt Lake County Sheriff's office; the LCI used for hauling guano (Item 66), which is the one boat other than a pleasure boat which may have used the Salt Lake County Boat Harbor, and which is not included among the boats in category 6 because it is subject to the same objection against being considered as engaged in trade or travel as are the boats used for hauling stock; the boat (Item 69) used by John Clawson Silver as a "promotional and goodwill ambassador"; the barge (Item 70) used by Mr. Silver to haul salt crystals "not to sell" but just "for decoration and pleasure"; and the "crash boat" (Item 77) supposedly operated on the Lake by the Hill Air Force Base. Also included here are the boats

(Items 71 and 72) used by the Sanders Brine Shrimp Company for harvesting brine shrimp from the lake.

8. All that need be said of the boats in the last category is that the evidence discloses that they were on the lake, but reveals nothing about their uses.

Thus, the evidence shows that in the 145 years since the discovery of the lake, there have been on its surface but seven vessels unmistakably engaged in trade or travel in the customary mode of trade and travel on water. The trade conducted by these vessels was sporadic; their careers were short. The only one of these vessels to carry passengers and freight on a regular schedule was in service for less than a year. A correlation of the dates when these seven boats were on the lake with the graph (Ex. P–2) showing the levels of Great Salt Lake from 1850 to 1968 (see Appendix 8) reveals that all these boats were launched at a time when the level of the lake was much higher than it was on the date of statehood in 1896. Indeed, the evidence indicates that all commercial traffic on Great Salt Lake had *ceased* by 1888, well before Utah became a State, and during a period when the level of the lake was higher than it has ever again reached.

And not one true use of the lake as a highway for trade and travel has occurred *since* the date of statehood. On the basis of actual use for trade and travel, the lake obviously is not, and was not on the date of statehood, navigable as a matter of fact.

SUSCEPTIBILITY OF THE LAKE TO USEFUL NAVIGATION

No doubt sensitive that the actual record of navigation on the Great Salt Lake may well be deemed in-

sufficient, the State seeks to bolster its case by invoking the rule that, in some circumstances, navigability may be established by merely showing that at Statehood the water course was "susceptible of commercial navigation" (see Utah Br. 13). We now turn to that claim.

It is important to stress the limitations of the rule. As we have already noted, the feasibility of future artificial improvements to the water course—or indeed, the predictability of natural changes—is *not* to be taken into account in assessing navigability for the purpose of a State claim to submerged lands. The law is simply that actual navigation at Statehood need not be shown if the water course, in its then state, was susceptible of commercial navigation but was not yet so used because of prevailing "conditions of exploration and setlement." Applying that standard, we submit the Great Salt Lake does not qualify.

1. Indeed, since the Lake was discovered (1824 or 1825) more than 70 years before the date of Utah's admission to the Union (1896) and settlement of the area had largely occurred by that time, it is doubtful whether the "susceptibility" rule is appropriately invoked at all. Ever since 1850 there have been sizeable settlements near the Lake. Salt Lake City, of course, was the first, and in 1852 Stansbury remarked of it (Ex. D–3, p. 4):

> The founding, within the space of three years, of a large and flourishing community, upon a spot so remote from the bodes of man, so completely shut out by natural barriers from the rest of the world, so entirely unconnected by watercourses with either of the oceans that

> was the shores of this continent—a country offering no advantages of inland navigation or of foreign commerce, but, on the contrary, isolated by vast uninhabitable deserts, and only to be reached by long, painful, and often hazardous journeys by land—presents an anomaly so very peculiar, that it deserves more than a passing notice.

In 1856 there were over 77,000 people in the Territory of Utah (Ex. D–3, p. 24), most of them undoubtedly in the vicinity of Salt Lake City, and fifteen years later the hotels of Salt Lake City were accommodating 1,515 visitors (Ex. D–3, p. 25). By 1890 the total population of Utah was 207,905 (Ex. D–3, p. 29), presumably most of it centered then where it is now, in Salt Lake, Davis and Weber Counties, on the eastern side of the Lake (Ex. D–3, pp. 168 and 280)—which in 1960 had 558,539 residents (Ex. D–3, pp. 281 and 282).

In the circumstances, it is plain that the limited use of the Lake before Statehood cannot be attributed to the undeveloped character of the area. As the history of the Lake since 1896 sufficiently shows, time has not turned it into a useful commercial highway. The fact is that the Great Salt Lake was never "susceptible" of filling that role.

2. It is, undoubtedly, the physical situation of the Lake which is chiefly responsible for the incredibly insignificant use made of the Lake over the last 145 years. The Lake lies in a "vast, flat, sterile basin" (Ex. D–3, p. 165). It is a residue of an ancient sea, and occupies a shallow depression in the otherwise re-

markably flat plain which once was the bed of that sea (Ex. P–31, p. 27). It is the drain for a great area, the Lake itself having no outlet. When the surface of the Lake is at 4,195 feet above sea level, the maximum depth of the Lake is about 25 feet; (Ex. D–2) the *average* depth of the Lake, however, is much less. Most of the shore of the Lake has a slope of less than 1 foot in 1,000 feet (D–4, Item 00, p. 2).

Thus, all around that portion of this great flat basin covered by the waters of the Lake stretch huge expanses of smooth, flat, salt-impregnated lands not covered by the waters of the Lake. The map which accompanies the stipulation in this case, and which shows the "reliction lands", well illustrates the extent to which the flats separate the water of the Lake from usable dry land. The flatness and shallowness of this closed basin (that is, a basin without an outlet) have a number of consequences, two of which (each being the corollary of the other) are to make the shores of the lake extraordinarily desolate, and access to the Lake extremely difficult. As Dale L. Morgan wrote, "Save only for the southeastern beaches at the base of the Oquirrhs, it [the lake] is everywhere bulwarked with mud morasses and salt marshes which have made is nearly inaccessible and have done much to preserve its atmosphere of desolate strangeness." Ex. D–3, p. 167.

There can be no question that the Lake has, in fact, preserved its desolate strangeness. The "bleak and naked shores, without a single tree to relieve the eye * * *" which Captain Stansbury saw in 1849 are

still as bleak and naked as ever. In 1861, Richard F. Burton, the famed world traveler, described the western side of the Lake as "a perfect desert—a salt and arid waste, of clay and sand, with the consistence of mortar when wet, which cannot boast of a single stream; even the springs are sometimes separated by 'jornadas' of seventy miles." Ex. D–3, p. 61. In 1959—almost 100 years later—a National Park Service reconnaissance study to determine the potentialities of Great Salt Lake as a national park or monument stated that "the entire western shoreline is a desolate inaccessible wasteland of salt flats." Ex. D–4, item D p. 4. A guidebook to the State of Utah, written in 1965, reports that "for fifty miles north of Salt Lake City, white mud flats and marshes of the Inland Sea stretch desolate and forbidding beneath the mighty wall of the Wasatch Range. The sea itself has retreated westward, as if exhausted from countless ages of beating against the impregnable mountain rampart; now it lies brooding in solitude, far from the pleasant lands that men prefer. Not many people come into intimate contact with Great Salt Lake, for it is too remote, too well protected by its shield of encircling mud and marshes." Ex. D–3, p. 165.

And, indeed, the map of the general areas of the lake introduced into evidence by the plaintiff—Ex. P–1—shows how well the lake's encircling bogs, marshes and flats fend off intruders. Except for Lakeside on the west shore of the lake—a spot inhabited by perhaps fifty people who maintain the tracks of the Southern Pacific Railway—there are no settlements or com-

munities of any kind immediately bordering on the lake. In fact—and again with the exception of the fifty-peopled Lakeside—there are absolutely no communities at all anywhere near the western and northern shores of the lake throughout all that vast area from Grantsville, which is about seven miles from the south shore of the lake, along the western and northern shores of the lake over to Brigham City, which is over twenty miles from the present waterline of the lake on its eastern shore. No settlements, communities, or towns of any kind appear on plaintiff's Exhibit 1; instead, what appears on the map for this area are a bombing and gunnery range, the Great Salt Lake Desert, a wildlife refuge, extensive salt flats, and an abandoned salt plant. Or, to put what the maps shows into the words of Dale L. Morgan: "Men have made themselves at home only along the southern and eastern shores of the lake. Except along the old route of the Central Pacific over the Promontory summit, and around the north shore, which was finally abandoned in 1942, and along the Lucin Cutoff, with its service points and sidings, the northern and western shores of the lake are almost completely uninhabited." (Ex. D–3, p. 168.)

But even along the southern and eastern shores of the lake, there are no settlements immediately adjacent to the water: all of the centers of habitation here are separated from the lake by from five to twenty miles of bogs, marshes and flats. Exhibit D–1, showing the southern portion of Antelope Island, and the shores of the lake near the old Saltair Resort, graphically

depicts the salt flats which are as characteristic of the eastern and southern shores of the lake as they are of the western; as an 1892 guidebook stated with respect to a beach at that time about six miles from Syracuse: "like the entire east shore, this place is too flat and the bottom too muddy for fine bathing." Ex. D–3, p. 114. The small communities of Hooper, Roy, Clearfield, Syracuse and Kaysville; the large communities of Brigham City, Logan, Ogden and Salt Lake City: all are from five to twenty miles from the salt water. (Ex. P–1; Ex. D–2; Ex. D–3; p. 169; Tr. p. 254.) Says the same 1892 guidebook: "The nearest point to the lake from Salt Lake City is about ten miles distant, but it is almost inaccessible on account of the boggy character of the ground." (Ex. D–3, p. 113.)

It is but one aspect—although in this case a very important aspect—of the general inaccessibility of the lake resulting from the flatness and gradual shelving of the basin in which it is located, that it is unusually difficult to get boats from dry land across the boggy marshes into floatable water. References to this difficulty abound in the literature on the lake, beginning with the Mormon settlers who in 1848 explored the lake in their skiff on wheels, the "Mud Hen." They found, after rowing down the Jordan River to the lake, that (Ex. D–3, p. 53):

> The Jordan suddenly spread out without leaving any channel that would float our boat. We stepped out and drew our boat four miles, water varying from one to four inches, bottom sandy, covered with two or three inches of slime or soft mud; we did not discover a living thing

> in the water; water fowl in great abundance. Got aboard and steered for the first island (Antelope) hauled our boat over a bar one half mile, and when one and a half or two miles off the island the water again shoaled so that our boat struck bottom.

All through the course of their journey, they were obliged to haul their boat one, two or three miles to get into the eight or so inches of water needed to float it (Ex. D–3, p. 54); and when finally they returned to Salt Lake City, they "got into shoal water and when within one and a half mile of land ran aground," upon which "each one took his gun and provision and walked to land." (*Ibid.*) After completing the trip, one of the members of the party, Brother Hambleton, "suggested, what we considered a very appropriate and characteristic name for the lake, *viz.*, 'the briny shallow' in contradistinction to the 'briny deep.'" Ex. D–3, p. 54.

Shallow water and the constant running aground of his yawl and skiff plagued Stansbury during his survey of the Lake in 1850. Approaching the Lake from the Jordan River, he found, as had the party on the "Mud Hen" before him, that the "channels became less defined and more shallow as we advanced" (Ex. D–3, p. 7.) "We were therefore obliged to unload the boat entirely * * *. After six hours of severe labour, we at length succeeded in reaching water that would float our little craft * * *." (*Ibid.*) Later "a line of soundings was run until midway, when the boat grounded" (Ex. D–3, p. 9). "The skiff was sent ahead with an officer, but it was soon left on

the flat, and the party waded through soft mud and water to the shore" (Ex. D–3, p. 9). "Starting from the springs with the boats, we attempted to make our way to the point where the eastern range seemed to terminate; but the water was so shallow that it was impracticable. After many fruitless attempts, the boat was brought as near the shore as possible, part of the baggage loaded into the skiff and pushed toward the land. It was impossible, however, to bring even this light barque nearer than within a quarter of a mile of the beach, and the luggage was transported to shore on our shoulders." (Ex. D–3, p. 12). "Moved again today, with the intention of encamping at the head of this arm of the lake, but the water became so shallow that not even the skiff would float, and we had to resort to the usual process of transporting beds and baggage on our backs to the shore." (Ex. D–3, p. 14.) "Anchoring our boat to keep her from drifting off, we waded some half-mile to the shore, and proceeded nearly three miles inland on our bare feet, over a sandy flat, and plunged through thick, oozy mud nearly knee-deep until we reached the growth of reeds we had seen from the boat." (Ex. D–3, p. 16).

Further to catalogue here the instances supporting Stansbury's statement that he was "continually baffled by shoals, which could not be seen until the boat grounded upon them" (Ex. D–3, p. 21), is not necessary; suffice it to conclude with Stansbury's remark, when a portion of his party using the skiff was for a time lost because of a storm, "The loss of the skiff is severely felt the nature of the shore being such that

the large boat, when loaded, cannot, in many places, approach within two or three miles of the land, and the lighter vessel is therefore indispensable." (Ex. D–3, p. 19).

And again, a hundred years later, the situation was still the same. At a public hearing held in Salt Lake City on July 10, 1946, to consider the advisability of providing a harbor for light draft vessels on Great Salt Lake, Dr. Thomas C. Adams said (Ex. D–4, Item QQ, p. 15):

> The particular needs of boat operators are for deep water, protected anchorage and tying space of ample size, and with utilities and services customarily required at small harbors. On Great Salt Lake they need, in effect, access to the Lake which in its natural stage is surrounded insofar as boat operation is concerned with an almost impenetrable barrier consisting of broad continuous belt, a very gently sloping, soft, sandy beach and adjoining shelves. Boats of any consequence cannot be operated, cannot be maintained or outfitted, or even placed in the water under such circumstances.

Dr. Adams' testimony is of particular significance because of his special knowledge of the Lake; Dale L. Morgan, in 1946, described him as "an engineer long concerned with the lake and as commodore of the Great Salt Lake Yacht Club [he] has an unequaled fund of information about the lake which he has been at pains to place at my disposal." (Ex. D–3, p. 214.)

Another consequence of the physical situation of the Lake—its being in a closed basin, without an outlet—

is that the level of the Lake is subject to marked fluctuation. (Ex. D–3, pp. 274 to 278). And, since the basin in which the Lake is located is so flat, the fluctuations in the level of the Lake result in the covering or uncovering of large areas of lands. This condition further thwarts use of the Lake. An example of this is what happened after the reconstituted Great Salt Lake Yacht Club started to use the pier at Saltair in the late 1920's (Ex. D–3, p. 211):

> But that deadly lake level, which so often had disastrously intervened upon boating activities, either by rising to flood shore facilities or by so far withdrawing from them as to render them useless, once again began its assault upon the enthusiasm for yachting. The facilities at Saltair, between 1928 and 1935, became increasingly less satisfactory as the lake shrank upon itself. It was difficult to reach the boats, for the increasing shallowness of the water necessitated anchoring farther and farther out from the pavilion. And even when the water was deep enough to allow the boats to come to the pier, there was not protection from waves and storms.

In fine: the shallowness of the Lake, the difficulty of access to it, the great distances from the far water line of the Lake to depths capable of floating a boat, the inhospitable nature of the great bogs, marshes and salt flats surrounding the Lake, the desolateness of the immediate environs of the Lake, are physical features of the lake which negative its susceptibility to use as a highway of commerce; these physical features coupled with the facts that there are no com-

munities along the shores of the Lake, although the Lake is within twenty miles to half the population of Utah, and that in the 145 years that people have been living near the Lake, it has been but sparsely used, there having been no true commercial use of the Lake after the date of Statehood, nor to any marked extent for twenty-five years prior to the date of Statehood; all this compels the conclusion that the Lake, as a matter of fact, was not navigable at the time of the admission of Utah into the Union.

CONCLUSION

Great Salt Lake is, as the State remarks, one of the largest bodies of water in the Western Hemisphere (Br. p. 52). An outsider, seeing on a map of the United States a large patch of blue second only to the Great Lakes, would naturally impute to the area the activities customarily associated with bodies of water of this size: substantial cities which are centers of commerce whose vessels engage in intensive trade with each other by regularly plying the waters of this large lake. He would of course be wrong. The inutility, the foresakenness, of the Lake, and its commercial irrelevance to the area in which it is situated, have long been known to the local inhabitants who have observed it over the years. We need only cite guides to Utah prepared in the 1870's and 1880's, which, in referring to the "General Garfield," consistently point out that "this boat is used chiefly for excursions, there being no business to justify Great Salt Lake navigation" (Ex. D-3, pp. 75 (1879), 88 (1884); 102 (1888), and 107 (1888).

The matter is well summed up by Dr. Thomas C. Adams (whose particular qualifications to express a view on the subject we have already discussed) in testimony before the Senate Subcommittee on Public Lands in 1965 (Ex. P–31, p. 141):

> The navigability of the lake is obviously a matter for serious question. The lake is not now nor has it ever been a channel of commerce. On three historical occasions the water level has become so low due to natural causes that the prevailing belief was that the lake would dry. The only attempt, many years ago, to pursue regular commerce was shortlived and commercially not successful. Other operations of craft have been in the nature of desultory recreational boat with small craft transportation of livestock to and from summer ranges in some high-water years, or a few operations of floating construction equipment which might equally have been conducted in a swamp. The shores of the lake have rarely been usable for boat landings, no usable piers now exist, and the only attempt to construct and operate a public harbor of refuge has been abandoned. * * * The State of Utah has been completely unmindful about navigability of the lake, contributing in no way to this by regulation or public works and often proposing to do things or allowing others to do things which seriously impair the physical navigability of the lake.

As Dale L. Morgan's book on Great Salt Lake puts it: "The lake has never been hospitable to commercial boats * * *," and "has had only the most negligible of influences in the economy of its hinterland" (Ex.

D–3, pp. 173 and 213). This is what the evidence presented in the hearing in this case bears out—both the positive evidence as to the difficulty of use, and the negative evidence as to actual use.

The United States urges the Special Master to find the Great Salt Lake is not navigable and to adopt the proposed Findings of Fact and Conclusions of Law appended hereto.

Respectfully submitted.

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APPENDIX 1

Proposed Findings of Fact and Conclusions of Law

FINDINGS OF FACT

1. The State of Utah was admitted into the Union on January 4, 1896 [29 Stat. 876].

2. Great Salt Lake is a nontidal body of water entirely within the State of Utah. [Exs. P–1, P–2, P–3, D–4, Item 00, p. 3.]

3. The Bear, Weber, and Jordan Rivers flow into Great Salt Lake. The Weber and Jordan Rivers are entirely within the State of Utah; the Bear River originates in Utah, but flows through Wyoming and Idaho before reaching Great Salt Lake. [Exs. P–1, P–6, P–7, P–32, p. 33.]

4. Great Salt Lake has no outlet. Within historic times, it has had a maximum length of approximately 77 miles, a maximum width of approximately 32.5 miles, and a maximum depth of about 30 feet. [Exs. P–1, P–2, P–3, P–4, P–5.]

5. The Lake occupies a flat, relatively shallow basin in the area known as the Great Basin. It is bordered on the east by the Wasatch Mountains, and on the west by the Great Salt Lake Desert. The Oquirrh Mountains are located on the south and several small mountains are situated on the north. [Exs. P–1, D–4, Item 00, p. 2.]

6. The shore of the Lake has a slope of less than 1 foot in 1,000 feet. Except for an area at the southeastern shore of the Lake, at the base of the Oquirrah Mountains, the Lake is surrounded by flat stretches of

salt marshes and bogs, sometimes several miles in width. [Exs. P–1, D–3, p. 167, D–4, Item QQ, p. 15.]

7. Settlement in the vicinity of the Lake began in about 1847; the area on the eastern shore and within twenty miles of the Lake has always been the most populated portion of the State; in 1960, the number of persons in Davis County, Salt Lake City and Ogden, all of which areas are within twenty miles of the Lake, was approximately 325,000, and comprised almost half of the population of the State of Utah. [Ex. D–3, pp. 4, 168, 169, 280, 281, 282.]

8. Except for Lakeside on the west shore of the Lake, which has a population of about 50 people who maintain the tracks of the Southern Pacific Railway, there are no communities immediately bordering the Lake. On the eastern and southern shores of the Lake, there are no communities nearer than four miles to the waters of the Lake; on the western and northern shores, except for Lakeside, there are no communities anywhere near the Lake within the State of Utah. [Ex. P–1, Tr. 253.]

9. The Lake is physically capable of supporting large boats, barges and similar craft currently in general use on bodies of water other than Great Salt Lake. [Tr. 202–208.]

10. A total of forty boats can be identified as having been on the waters of Great Salt Lake from 1824 until the admission of Utah into the Union in 1896.

11. Exclusive of craft used to construct or maintain the railroad across the Lake, approximately fifty craft can be identified as having been on Great Salt Lake since the date of Utah's admission into the Union.

12. The activities engaged in by the vessels known to have been on the Lake since 1824 include: (1) transporting passengers, ore, fence posts, railroad ties

and salt; (2) hauling livestock to and from Antelope and Fremont Islands as part of the operations of a ranch; (3) carrying guano as part of a company operation from Gunnison and Bird Islands to the mainland; (4) the harvesting of brine shrimp; (5) the construction and maintenance of railroad lines across the lake; (6) excursions; (7) the exploration and scientific study of the Lake; (8) private recreation and pleasure; and (9) rescue operations.

13. In the total history of the Lake, only seven boats can be identified as having engaged in the activity of commercially transporting passengers, ore, fence posts, railroad ties and salt. Only one of these vessels, the *City of Corinne,* engaged in regularly scheduled freight and passenger service. It began these operations in June 1871 and terminated them in June, 1872. One of these "vessels," a raft of railroad ties, had been on the Lake one time only, in 1869. All of these boats had been used on the Lake and had ceased operations prior to the admission of Utah into the Union, and five of these boats had either been wrecked or had not engaged in the activity of carrying passengers, ore, fence posts, railroad ties and salt for at least twenty-five years prior to the admission of the State of Utah into the Union in 1896.

14. The only dock ever along the Lake available for use by the general public was the Salt Lake County Yacht Harbor, which was completed in 1939 and was no longer significantly used in 1960. [Ex. D–4, Item C, p. 1.]

15. At no time since 1824 did or could vessels on the Great Salt Lake travel by water from the Lake up any of its affluents to any place outside of the State of Utah. [Ex. P–32, p. 33.]

CONCLUSIONS OF LAW

1. A State upon its admission into the Union acquires by virtue of its sovereignty title to the beds of all the navigable bodies of water within its borders.

2. In any proceeding involving the question of the navigability of a body of water, the burden of proof is always on the proponent of navigability.

3. Navigability, when asserted by a State as the basis of its title to lands underlying bodies of water, is necessarily a question of federal law to be determined according to the general rule recognized and applied in federal courts.

4. Navigability under federal law, when asserted by a State as the basis of its title to lands underlying bodies of water, must be determined as of the date of the admission of the State into the Union.

5. To be navigable under federal law, a body of water must constitute a highway of commerce over which trade and travel is or may be carried on in the customary modes of trade and travel on water. Mere depth or expanse of water, without profitable utility, will not render a water course navigable in the legal sense.

6. The commerce which must be shown to exist or to be capable of existing on a body of water in order for that body of water to be deemed a navigable water for the purpose of vesting in the State title to its bed must be practical, useful and beneficial to the public. The fact that it is used for pleasure boating, or to enable fisherman to float their boats, is not sufficient. A theoretical or potential use for commerce, or one that is temporary, precarious, and unprofitable, is not sufficient.

7. In determining the navigability of a body of water in an area which was populous and had been

long settled at the time of the admission of the State in which it is located into the Union, the actual use or nonuse of that body of water as of the date of Statehood will be deemed most persuasive.

8. The use of boats by the owners of Fremont and Antelope Islands in Great Salt Lake to carry sheep and cattle back and forth from their island grazing fields to the mainland in connection with their business operation, as well as the use of such boats to carry supplies to employees of these islands, where such activity was carried on on behalf of not more than five people or organizations, cannot be deemed to show the utility for commerce to the general public of the waters of Great Salt Lake.

9. The hauling of guano from Gunnison and Bird Islands in Great Salt Lake cannot be deemed to show the utility of the waters of Great Salt Lake to the general public, where nothing is known as to the date or the extent of the guano hauling operation on Gunnison Island, and it appears that only one boat was used, fifty years after Statehood, and then for a period of not more than nine years, in hauling the guano from Bird Island.

10. The use of boats for harvesting shrimp from the Lake is not trade and travel on water in the customary modes of trade and travel on water.

11. The use of boats for the construction and maintenance of a railroad across the Great Salt Lake does not constitute trade and travel on water in the customary modes of trade and travel on water.

12. The use of boats to take persons on pleasure excursions of the Lake, where such excursions are ~~for the most part from~~ twenty minutes to four hours in duration, the boats then returning to the point whence they had departed, without having discharged any passengers on the way, is not trade and travel on

water in the customary modes of trade and travel on water.

13. The use of boats for the exploration and scientific study of Great Salt Lake does not constitute trade and travel on water in the customary modes of trade and travel on water.

14. The use of boats for recreational and pleasure sailing on the Great Salt Lake does not constitute trade and travel on water in the customary modes of trade and travel on water.

15. The use of boats for police patrol activities and rescue operations does not constitute trade and travel on water in the customary modes of trade and travel on water.

16. A showing that in the last 145 years, only seven boats on Great Salt Lake have been devoted to the hauling of passengers and freight, only one of which operated on a regular schedule (such operation not lasting more than one year); that of the seven boats, five were either no longer in existence or no longer carrying passengers and freight at least twenty-five years prior to Statehood, while either the existence or activities of the other two boats at the date of Statehood is unknown; that all seven of these boats were operating on the Lake at a time when the level of the Lake was much higher than it was at the date of Statehood, and much higher than it has ever been since again, is not sufficient to establish that Great Salt Lake was, at the time of the admission of Utah into the Union on January 4, 1896, a highway of commerce over which trade and travel were or could have been carried on in the customary modes of trade and travel on water.

17. A showing that after Statehood, there were no boats at all engaged in the carrying of passengers and freight, even though the population in the area con-

tinued to increase; that such uses as were made of the Lake after Statehood were extremely limited in scope, and of no commercial importance or consequence to the general public living in the vicinity of the Lake; that there never was more than one harbor on the Lake accessible to the public, which harbor was in use only after about 1935, and was never used by any vessel carrying passengers or freight from one part of the Lake to another, save for a guano boat, if that be deemed an exception, and which harbor is not now in use; that the Lake is surrounded by extensive marshes, bogs and flats which make access to it difficult; that the shores and bed of the Lake generally have a slope of less than one foot in a thousand feet, a condition which makes the launching of craft on the Lake difficult; that with the exception of the railroad settlement at Lakeside, which has a population of about 50 people, there are no communities immediately on the shores of the Lake, nor within at least four or five miles of the short of the Lake; such a showing is sufficient to warrant the conclusion that Great Salt Lake's susceptibility to use as a highway of commerce is too conjectural and hypothetical to establish its navigability for the purpose of vesting to the State title to the bed thereof.

18. Great Salt Lake was not on the date of Utah's admission into the Union navigable under the laws of the United States, and title to the bed of the Lake, therefore, did not on January 4, 1896, vest in the State of Utah, but remained in the United States.

19. The lands conveyed to the State of Utah on June 15, 1967, pursuant to the Act of June 3, 1966 (80 Stat. 192), include all of the lands below the meander line of Great Salt Lake as depicted on the map attached to the Stipulation filed by the parties in

this case, subject to the reservations and conditions set forth in the Act of June 3, 1966, *supra*.

20. The State of Utah having had no title to the bed of Great Salt Lake prior to the conveyance thereof to the State by the United States on June 15, 1967, is required, in order to retain title thereto in accordance with the Act of June 3, 1966, *supra*, to pay to the United States within two years from the date of the decree herein the fair market value of the entire bed of the Great Salt Lake below the meander line of that Lake, as that value shall be determined by the Secretary of the Interior as of the date of the decree herein

APPENDIX 2

1. The first boat ever on the Lake[1] was the bull boat (a shallow draft tub-shaped boat made of buffalo skins) of Jim Bridger, to whom the credit for discovering the Lake is usually given. The traditional story is that Bridger was one of a party of trappers who, while travelling along the Bear River, began to speculate as to the course and destination of that stream. A wager was made, and Bridger, the youngest member of the crowd, was chosen to learn the answers. This was either late in 1824, or early in 1825. Bridger sailed down the stream and in due time reached Bear River Bay, where, after tasting the water, and spitting it out, he concluded that he had reached the shores of the Pacific Ocean. Ex. P–8, p. 18A; Ex. D–3, pp. 252 and 254.

2. In 1826 James Clyman and three companions "searching for beaver skins" circumnavigated the Lake in bullboats. There is no evidence that beaver skins were ever found, or that the Lake was ever used by trappers for the transportation of pelts. Ex. P–8, p. 18A; Ex. D–3, pp. 32, 251 and 254.

3. In 1843, the explorer John B. Fremont, in the company of Kit Carson and several others, sailed in an eighteen foot long "frail batteau of gumcloth distended with air, and with pasted seams" to the island in Great Salt Lake which now bears his name. Ex. P–8, p. 1; Ex. D–3, pp. 93, 252 and 254.

4. The first vessel put on the Lake by the Mormon

[1] There is no authentic record of the Indians ever having placed any boats on the Lake. Cf. Ex. D–3, p. 12.

settlers of the Great Salt Lake Valley was the "Mud Hen," which, in 1848, at the direction of Brigham Young, carried Albert Carrington and others on a two week exploring trip of the Great Salt Lake and its islands. The "Mud Hen" was a skiff on wheels, made of five fir planks. It was 15 feet 4 inches long and 4 feet 4 inches wide. Ex. P–8, p. 18A; Ex. D–3, pp. 53, 54 and 180.

5. In the spring of 1850, Captain Howard Stansbury of the U.S. Army Topological Survey Corps launched on the Great Salt Lake a yawl which had been built during the preceding winter, and in this yawl he and his company made the first accurate survey of the Lake. The yawl was named "Salicornia" or "Flower of Salt Lake" by the exploring party, but was generally referred to only as "The Sally." Ex. P–8, p. 18A; Ex. D–3, pp. 5, 8, 22, 180 and 261.

6. Along with "The Sally," Captain Stansbury used during his survey of the Lake in 1850 a small skiff. Ex. P–8, p. 18A; Ex. D–3, pp. 8 and 22.

7. On January 30, 1854, Brigham Young launched his boat, "The Timely Gull." It was 45 feet long, and although designed for a stern wheel to be propelled by horses working a treadmill, it was in fact always propelled by wind and sail. The boat was used primarily to carry church cattle to Antelope Island, but it was also used to transport cedar wood, salt and flagging, as well as for pleasure excursions. The boat was wrecked by a gale in 1858. Ex. P–8, pp. 2 and 18A; Ex. D–3, pp. 24, 40, 180, 182, 183, 229 and 272.

8. A notice published in the "Deseret News" on May 9, 1855, by one J. Cowdy announced that "the sail boat 'Deseret' is now ready to take parties out on the water, for pleasure excursions, either on Jordan or Salt Lake on reasonable terms * * *." Ex. P–8, p. 2.

9. When **Brigham Young visited** Antelope Island in 1856, he **was taken there from the shore** of the Lake in a **rowboat used by Joseph Toronto** and Peter O. Hansen **"while the teams forded it."** Ex. D–3, pp. 38 and 229.

10. In 1865, David L. Davis, who was originally from Wales and had arrived in Salt Lake City the year before, was sailing on the Great Salt Lake in "the brave sloop 'Eureka,' which was among the first pleasure craft on the Great Salt Lake * * *," and was the first of many pleasure craft used by "Captain" Davis during the following 50 years. The "Eureka" was 19 feet long with a six foot beam, and was on the Lake for about 8 or 10 years after 1865. It was engaged by the United States Geological Survey in 1869 for use in surveying the lake. Sailing was Captain Davis' hobby and recreation—he was for many years the "Captain" of the Salt Lake Yacht Club, which had for its object "the advancement of the general interest in aquatic sports"; his trade, in which he had been engaged since he was 14 years old, was that of a merchant. Ex. P–8, pp. 20, 23B, 23D, 24, 25 and 27.

11. For a number of years in the 1860's there was on the Lake the "lonesome pleasure yacht" of the Walker Brothers, who were merchants in Salt Lake City. Little is known about this boat, except that it was built by Gammon Hayward, and was a sailboat, "designed purely for pleasure purposes." Ex. P–8, p. 18A; Ex. D–3, pp. 75, 102, 188 and 209.

12. In September, 1867, Elbert Eastam and Ben Hampton, "having built a yacht at Bear River bridge, sailed down Bear River to G.S. Lake, 75 miles, thence up the Jordan River to G.S.L. City, making the journey in two days." Nothing else is known about this yacht. Ex. D–3, p. 57.

13. On April 14, 1867, John B. Meredith arrived near the bridge on the Jordan River, with the schooner "Star of the West," having a cargo of salt from Great Salt Lake, "he claiming it was the first voyage up the river from the lake, thus proving the river navigable." There is no record of this boat's ever having carried another cargo of salt. In June, 1868, the boat was used to supply water to a survey party headed by one F. C. Hodges, and in the course of this enterprise was swept by a gale onto some rocks, where it was broken. There is no evidence that it was ever floated again. Ex. P–8, p. 18A; Ex. D–3, pp. 56, 140 and 189.

14. On March 7, 1869, David L. Davis and one James Glade "went down to the river in W. D. Williams' boat." There is no evidence as to what kind of boat this was, or what it was used for. Ex. D–8, p. 20.

15. As the Union Pacific and Central Pacific Railroads were extended toward each other in the race to complete the transcontinental railroad (the driving of the Golden Spike joining the two halves of the continent took place at Promontory, immediately north of Great Salt Lake, on May 10, 1869), "there was a boom in the market for lumber, and in its wake Great Salt Lake for the first time began to commend itself for commercial navigation." in 1867 or 1868, General Patrick Connor, who had come to Utah with the United States Army to police the State, and had decided to stay, launched on the Lake the "Pioneer," a flat-bottomed sail boat used for carrying railroad ties. How long it was in use is unknown, but its hulk was eventually abandoned at the mouth of the Jordan River. Ex. P–8, p. 23C; Ex. D–3, pp. 140, 190.

16. Apparently General Connor had a contract with the Union Pacific Railroad to supply it with ties. For this purpose, on December 11, 1868, he launched on the Lake its first steamboat: the "Kate Connor,"

named for his daughter. The boat was a side wheeler 55 feet long, and with a beam of 18 feet. It was built by Gammon Hayward, and was used for carrying railroad ties and telegraph poles to Promontory. The boat was not a financial success. Although most of the writers who mention the boat say that it sank in 1871, the boat actually was purchased in 1872 by Christopher Layton, and thereafter used for a number of years to haul sheep to and from Antelope Island (apparently for the Mormon church). Ex. P–8, pp. 17, 18A, and 23C; Ex. D–3, pp. 69, 75, 190, 192, 245 and 254.

17. General Connor also put on the Lake in 1869 the "Pluribustah," a schooner of 100 tons burthen. Almost nothing is known about this vessel. Ex. P–8, p. 18B; Ex. D–3, pp. 75, 102, 190 and 219.

18. In order to supply the demand for railroad ties needed for the construction of the Utah Central Railroad (which connected with the Union Pacific at Ogden) timber was cut and hewed in Dry and Pine Canyons in the winter of 1868–9, hauled to the Lake, and there built into a large raft, 300 feet long by 16 feet wide, which was then poled to the vicinity of Farmington, where it was dismantled, and the ties carried to the construction site. Ex. P–8, p. 2B; Ex. D–3, p. 191.

19. On May 24, 1871, the "City of Corinne," was launched in the Bear River. Except for the barges used in 1957 to 1959 to construct the railway causeway (see Item 67, *infra*), this is the largest boat ever to have been on Great Salt Lake, being a three-decker steamboat, 150 feet long and of 250 tons burthen, propelled by a large paddle wheel at her stern. In early June, 1871, it began to carry ore and passengers from Lake Point, on the south shore of the Lake, to Corinne, on the Bear River on the northeast shore of the Lake, making three trips a week. But within a few

months—by the end of 1871—the boat was reported a financial failure, and in April, 1872, the boat was sold to the Lehigh and Utah Mining Company, and was immediately converted into an excursion boat. By June, 1872, the boat was operating as an excursion steamer out of Lake Side, on the east shore of the Lake below Farmington. In 1875, the boat was renamed the "General Garfield," and moved its home port to Lake Point, also known as Clinton's Landing, on the south shore of the Lake, where it took pleasure seekers 15 or 20 miles out into the Lake in the course of two hour cruises. In 1881, the boat was permanently moored by its then owner, Captain Douris, a short distance west of Black Rock, at a place which came to be known as Garfield Landing, and was used as a hotel and restaurant, its paddle wheel, smokestacks and machinery having been removed. In 1904, the boat caught fire and was destroyed. Ex. P–8, pp. 3, 4, 5, 23C and 26C; Ex. D–3, pp. 25, 74, 75, 88, 163, 193, 206, 207, 229, 244, 253 and 254.

20. On August 9, 1871, John W. Young, a son of Brigham Young, launched "The Lady of the Lake," a "tiny steamboat." This vessel was 30 feet long, had a 10 foot beam, and weighed 7 tons. The boat was used only for pleasure, and although much publicized upon her appearance on the Lake, "she promptly disappeared in the prevailing fog of obscurity shrouding all the early boats." Ex. P–8, p. 18A; Ex. D–3, pp. 75, 88 and 209.

21. The "Water Witch," a yacht owned by the Salt Lake Yacht Club, appears to have been on the Lake from about 1875 to about 1880, and devoted to cruises for the pleasure of the members of the Club. On September 8, 1876, Captain Davis and others made an expedition in the "Water Witch" to determine the feasibility of making an outlet into the desert for the

waters of Salt Lake, the level of the Lake at that time being very high. They were unable to find a point for the proposed cut to be made. Ex. P–8, pp. 20, 23C, 23D and 26A; Ex. D–3, pp. 26, 80 and 225.

22. In September, 1877, Captain Davis put upon the Lake his catamaran, the Cambria, afterwards called the Cambria I to distinguish it from his later boats of the same name. It was about 19 feet long, and had a 10 foot beam. This boat appears to have been used only for pleasure cruises on the lake. It was manned until about 1891. Ex. P–8, pp. 20, 21, 22 and 23D; Ex. D–3, 80, 135, 141, 201 and 210.

23. The "Mary Askie" was one of a number of yachts owned by members of the Salt Lake Yacht Club. This yacht was owned by the Silver Brothers, and in 1877, 1878, 1879 and 1880 participated in the Club's regattas and other sports events. Ex. P–8, pp. 24 and 26A; Ex. D–3, p. 80.

24. The "Petrel" was another such yacht; it was owned by Captain Barratt, and was on the Lake at least until 1882. Ex. P–8, pp. 21, 24 and 26A; Ex. D–3, p. 80.

25. Captain Hudson's "America" was another vessel involved in the yacht club's regatta and sport activities in the late 1870's. Ex. P–8, pp. 24, 26A and 26B; Ex. D–3, p. 80.

26. "Maud," owned by Adam S. Patterson, was another yacht associated with the Yacht Club. The first reference to it is in 1880. There is no evidence that it was used for anything but pleasure and sport. Ex. P–8, p. 18A; Ex. D–3, pp. 80, 135 and 201.

27. The yacht "Pinafore" was associated with the Salt Lake Yacht Club in 1880; it had apparently been built "for the realistic presentation of an opera." Ex. P–8, pp. 18A and 30.

28. "Esther" was a small boat built by Captain

Davis; although there is no evidence as to the purpose of its use, it may have been an excursion boat. Ex. P–8, pp. 18A and 20.

29. After the conversion of the "General Garfield" into a hotel, Captain Dahl's steamboat called the "Whirlwind" took passengers on excursion trips on Great Salt Lake. There are references in the evidence to this boat's being on the Lake in 1884 and 1887. Ex. P–8, pp. 26C and 26D; Ex. D–3, pp. 88, 207 and 229.

30. Captain Douris, the former owner of the "General Garfield," also had his little side-wheel excursion steamer on the Lake; this was the "Susie Riter." The boat was on the Lake in 1886, but its total length of service was only about two years, for in a storm it went down at its anchor. Ex. P–8, p. 21; Ex. D–3, pp. 97 and 207.

31. A reference in the evidence, dated 1889, states that "the 'Eloise Sherman' is a propeller, now used for excursions." Nothing else is known of this boat. Ex. D–3, p. 98.

32. At an early date after the arrival of the settlers in the Great Salt Lake Valley, Henry William Miller and his brother, Daniel Henry Miller, occupied Fremont Island, and used it as a sheep range. Some time before 1884, Daniel Miller's son Jacob designed and helped build the "Lady of the Lake," used by the Millers to haul sheep to and from the island. The boat was 50 feet long and 12 feet wide, with two main masts, the largest one being 50 feet high. She flew four sails—two main sails and two jibs. The ship had two decks, and was capable of carrying 300 head of sheep at a time. When Judge Wenner acquired control of Fremont Island in 1884, he demanded that the Millers remove their sheep, and the boat was used for that purpose at that time. In addition to hauling

sheep, the "Lady of the Lake" was also used for hauling ore, salt and cedar posts. Eventually the ship, in a bad storm, was blown on the beach west of Farmington, where she stood for a number of years, until finally purchased by Judge Wenner (exactly when is not known, but Judge Wenner died in 1891). The ship was renamed the "Argo," and was overhauled for use in going to and from Fremont Island. It appears that this ship was eventually wrecked on the rocks at Promontory Point. Ex. P–8, pp. 16A, 16B, 16C, 16D, 17 and 18A; Ex. D–3, pp. 132, 141, 198, 229 and 236.

33. Before building the "Lady of the Lake," the Millers had used two other small boats. These may have been the sloop and schooner later sold to Charles Spackman, of Farmington, and eventually, shipwrecked near the Promontory. Ex. P–8, p. 16A; Ex. D–3, p. 236.

34. The Millers also built a 75 foot boat with three holds in it for hauling salts from various salt works around the Lake to a railroad connection. This may be the unnamed schooner referred to by Captain Davis as carrying salt from a bed a few miles north of Garfield Beach to a railroad near the Lake. In 1908, the wreck of this schooner could be seen near the tracks at Saltair. Ex. P–8, pp. 16D and 23C.

35. In addition to building boats for themselves, the Millers built prior to 1884 a cattle boat "for another company for the purpose of shipping cattle to Church [Antelope] Island." This was a flat boat about 50 feet long and 18 feet wide. Although there is no evidence in the record either to support or refute this conclusion, it seems likely that this is the cattle boat used by White and Sons, a company which carried on a wholesale butcher business in Davis County, and used Antelope Island for stock raising. The Company kept herefords from England (red cattle with white

faces and markings) as well as buffalo on the island. Their foreman on the island was William Walker, "an expert stockman," whose daughter, Zillah Walker Manning, testified at the hearing in this case. The boat was used by Mr. Walker, as an employee of White and Sons, to carry cattle to and from the island, as well as supplies for the Walker family. It was also occasionally used by the White and Walker families for pleasure trips. The boat appears to have been in use at least until 1903. Ex. P–8, pp. 15, 16D and 39A; Ex. D–3, pp. 229 and 233; Tr. pp. 219–229.

36. Living on Antelope Island at the same time as the Walkers was a George Frarey, who worked for a while at herding cattle on the Island. For this he used a "clumsy, scow-shaped cattleboat, sloop rigged with mainsail and jib, and steered by an oddly placed wheel on the forecastle deck." The boat was used for hauling cattle in 1891, and probably much earlier, but, by 1895 and at least until 1903, the boat was chiefly used for taking passengers on excursion trips over the Lake. Ex. P–8, p. 18B; Ed. D–3, pp. 195 and 196; Tr. p. 225.

37. There is also in the evidence, without any further description, a reference to "the Jake Winters' sheep boat." Ex. D–3, p. 229.

38. Another boat referred to, without any further identification, is George Payne's "Lilly of the Lake." Ex. D–3, p. 229.

39. In 1891, Captain David L. Davis supplanted his original "Cambria" with the "Cambria II," which was also a catamaran, but which was powered by the first gasoline marine engine in Utah. "Cambria II" was 42 feet long, with a 14 foot beam, and was yawl-rigged, with a main and mizzen mast. It appears to have been used for pleasure, and for excursions. It was still on

the Lake as late as 1909. Ex. P–8, pp. 18A and 23D; Ex. D–3, p. 142; Tr. p. 76.[2]

40. Alfred Lambourne, an artist who often took cruises on Great Salt Lake with Captain Davis, moved on to Gunnison Island in 1895 to live there, and to cultivate vineyards, in an attempt to acquire title to it under the Homestead Act. He lived on the island for 14 months, and apparently had the use, during this period of time, of a boat called "Hope." Ex. P–8, p. 18A; Ex. D–3, p. 203.

41. In 1902, the Southern Pacific Railway built a trestle across Great Salt Lake, this trestle, and the tracks on it, being called the Lucin cut-off. The construction of the trestle necessitated the use of seven tugboats and numerous small boats, and a wooden stern wheel steamer, "The Promontory," "which was built on the Lake as soon as the track laid west from Ogden reached sufficient depth of water." This steamboat may have been dismantled in about 1910. Ex. P–9, 10 and 13.

42. At the hearing in this case, counsel for the State of Utah introduced into evidence a picture of a boat called "Lucin," at anchor in San Francisco Harbor, and stated that it was "used at the Lucin cutoff." Nothing else is known about this vessel. Ex. P–8, p. 2D; Tr. p. 241.

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[2] There is a reference in the evidence to a "Cambria III." It is unlikely, however, that such a boat existed. What seems probable is that the author of the reference, knowing that the motor of the Cambria II—this being the first gasoline engine in Utah—was on display in the Utah State Capitol, assumed that the "Cambria" then on the Lake must have been a third "Cambria." It appears, however, that although the original motor on the Cambria II was replaced with a more powerful and a lighter engine as the technology improved, the boat itself was not replaced by another boat.

43. The "Augusta" was a gasoline launch used by the Southern Pacific Railway to patrol the Lucin Cutoff; it was on the Lake in 1908. Ex. P–8, p. 18A; Ex. D–3, pp. 134 and 204.

44. The "E. W. Marsh" was another boat owned by the Southern Pacific Railroad, and used for patrolling the Lucin Cutoff. Tr. p. 96.

45. A boat called "Old Salt Lake" was owned by Charles and John Backman. It seems likely that one of these is the same Mr. Backman who sometime after 1903 carried sheep over to Fremont Island for the owners of that island. Ex. D–3, p. 229; Tr. pp. 227 to 229.

46. The "Seagull" was used prior to 1903 for taking people on excursions to the islands of Great Salt Lake. Tr. p. 227.

47. An excursion boat called the "Alice Ann," which could carry eight passengers, was on the Lake in the years around 1907. Tr. p. 84.

48. John Dooley appears to have had the major interest in the Island Improvement Company which owned, subsequent to White and Sons, the ranching operation on Antelope Island. His tugboat, the "Ruth," was used to haul cattle to and from the island at least during the years 1914 to 1920. Ex. D–3, p. 236; Tr. pp. 85–87, 89, 93–96 and 100.

49. There is in the evidence an undated reference to "'Old Bob,' the Island cattle boat." No information concerning this boat is known. Ex. D–3, p. 229.

50. On June 10, 1909, the stern wheeler excursion steamer ("in good weather") "Vista," which had been operating on Great Salt Lake for two years, sank during a heavy storm. Apparently it was soon refloated, only to be hurled on the shore again during a big storm in July, 1909. The ultimate fate of this ship is not

known. Ex. P–8, pp. 23D, 34A, 34B and 34C; Tr. pp. 87 and 88.

51. The pleasure boat "Irene" was another excursion boat on the Lake at the same time as the "Vista." It was a "large cigar-shaped affair with 50 horsepower gasoline engines." Ex. P–8, pp. 24D, 34B, 34C, and 34D; Tr. p. 87.

52. On July 2, 1909, President Joseph F. Smith and members of his family took a cruise to Bird Island, and other islands in the Great Salt Lake, on the "big gasoline pleasure launch" owned by the Saltair Beach Company. Ex. P–8, p. 34A.

53. W. H. Parker's gasoline powered boat "Victory" was launched on the Lake in July, 1909 The boat was 33 feet long, with a beam of 7 feet, 4 inches. In September, 1909, it engaged in a race with several other "small gasoline launches * * * for the championship of Great Salt Lake." Ex. P–8, pp. 34C and 34D.

54. One of the boats in the September, 1909 race was the "Cozy," Blair Richardson, Captain; Mrs. Richardson at the wheel. Ex. P–8, p. 34D.

55. Another boat in the race was the "Rescue," captained by Larsen, with Will Selly at the wheel. Ex. P–8, p. 34D.

56. Another boat was "Firefly"; Captain Newman; Miss Langford at the wheel. Ex. P–8, p. 34D.

57. Another boat in the race was "Galilee"; Captain, Ralph Brown, aged 10 years; Dorothy Brown, aged 8 years, at the wheel. Ex. P–8, p. 34D.

58. In 1920, the owners of the buffalo herd on Antelope Island used a gasoline launch capable of carrying twenty people both for going to and from the mainland and the island, and for towing a cattle trailer that had a capacity of forty animals. Ex. D–3, p. 238.

59. At the same time, the owners of Antelope Island

aiso used a smaller craft driven by an
propeller. Ex. D–3, p. 238.

60. Some years prior to the death of Captai
G. Brown, in 1937, one Thomas J. Holland w
him on a three day cruise of the islands of Gr
Lake. The cruise was made with a number o
in a fleet of twelve boats. Captain Brown
"mentor of the Salt Lake Yacht Club, a g
amateur sailors, carefully selected from busin
trade and professional circles—men who ha
knowledge of navigation, but a great enthusi
learning the rules of the sea * * *." Ex. P–8,

61. On October 6, 1935, a Standard Oi
crashed into the Lake, and the oil company
four boats to search for it. At the completion
operation, one of these boats was given to t
Lake County Sheriff's Office, where it was u
patrol the area for boats, bathers, in case of
difficulty on the lake, lost people." Ex. D–3,
Tr. p. 105.

62. In the early 1940's, Leon L. Imlay, a wi
the hearing, went to Gunnison's Island in Dic
dard's gasoline-driven sheep barge. The purpos
trip was to observe the guano deposits on the
Tr. pp. 70, 72, and 102.

63. Boats capable of carrying 12 to 15 pas
operated from the Sunset Beach Resort on Gr
Lake from 1934 to 1968. For the most part, pas
were brought to the beach by Greyline Mot
buses, were taken on a 20 or 30 minute trip
Lake, and then returned to their buses: all
one hour. However, parties could charter boat
evening for longer cruises. Tr. pp. 111–122.

64. Among the boats used for excursions at t
set Beach Resort shortly after the Second Wor

was a 28 foot Chris-Craft with an inboard motor. It was used for about 5 years. Tr. p. 113.

65. Also used by one of the excursion concessionaires (Donald Newhouse) at the Sunset Beach Resort was a 40 foot twin engine diesel, which could carry about 35 passengers. Tr. p. 113.

66. A 50 or 60 foot long boat—an LCI—is reported to have hauled guano from Hat Island or Bird Island to the Salt Lake County Boat Harbor during the years 1947 to about 1955. Tr. pp. 117 and 123.

67. In 1957, the Morrison-Knudsen Company began to construct for the Southern Pacific Railway a solid landfill causeway across the Great Salt Lake, parallel to the trestle built in 1902. The construction began early in 1957, and was completed early in 1959. Used in the construction of the causeway were six large dump barges, which were each 250 feet long, 55 feet wide, and 12 feet four inches deep at midship, port and starboard, and two feet deeper than that forward and aft. Pushing each of the barges was a tugboat of a thousand horsepower. Also used were five deck barges, which were 170 by 48 by 10 feet, two 600 horsepower twin screw tour boats, three 220 horsepower tugboats, two dredges, and a number of dredge tenders, anchor scows, anchor barges, pile driving barges, crew boats and scows. The total number of boats used was 39. When the construction work was completed, all except two of the boats used on this project were sold, and removed from the Lake. The two boats remaining on the Lake are used by the Southern Pacific Company for weekly inspections of the causeway. The Railroad has a total of four boats which it uses for these inspections. Tr. pp. 149, 152, 176, 177, 188, 199, 202.

68. In 1962, John Clawson Silver started to operate from the Sunset Beach Resort 20 to 45 minute nar-

rated tours of the Lake on his "sea monsters," that is, converted army amphibious boats. After about two years, he transferred his operation to his own beach, Silver Sands, and continues in that business today. He has a total of nine amphibious boats available for use, although only three are actually at the beach, the rest being in a warehouse. He also uses in this business a launch. Tr. 288, 289.

69. At some time in the recent past John Clawson Silver also used on the Lake a 36 foot Chriscraft boat which was primarily used to take people out on the Lake "as a promotional and goodwill ambassador" for an appliance store he formerly operated. He operated this boat for 13 years. Tr. p. 289.

70. Also in the recent past, Mr. Silver had a barge on the Lake which he used to bring in salt crystals and rock, "not to sell" but just "for decoration and pleasure." Tr. p. 289.

71. The Sanders Brine Shrimp Company, which since 1953 has harvested the small brine shrimp and their eggs from the Lake for processing and sale as tropical fish and trout food, uses three air boats in its operation. These boats are 18 feet long and six feet wide. Tr. pp. 158 and 160.

72. In the recent past, the Sanders Brine Shrimp Company used a 16 or 17 foot boat with a 50 horsepower outboard motor on it, but this boat could not get into the shallow water to which the air boats afford access. Tr. p. 158.

73. A regatta was held on the Lake in 1968, and a number of boats participated in it. Ex. P-26, P-27 and P-28; Tr. p. 211.

74. The "Gilbert," a 42 foot long, 13 ton vessel belonging to the State of Utah Geological and Mineralogical Survey, is currently used on the Lake for con-

ducting scientific investigations. Ex. P-14; Tr. pp. 139, 140, 144, 145 and 147.

75. The "Clyman," a 21 foot long Chriscraft with about an eight foot beam is also used by the Utah State Geological and Mineralogical Survey for the scientific study of Great Salt Lake. Ex. P-14; Tr. pp. 139, 145 and 147.

76. The Utah State Geological and Mineralogical Survey also uses three converted military amphibious trucks, or "ducks" in connection with its studies of the Lake. Ex. P-14; Tr. p. 139.

77. A witness at the hearing said that "Hill Air Force Base has one crash boat," but the witness did not state whether that boat now is, or ever has been, on the Lake. Tr. p. 132.

APPENDIX 3

	Name of Boat	Type of Boat	Owner or User	Date of Use	Purpose	Reference
1.		Bull Boat	Jim Bridger	1824-1825	Exploring	Ex. P-8, p. 18A; Ex. D-3. pp. 252, 254.
2.		Bull Boats	James Clyman	1826	Searching for beaver skins	Ex. P-8, p. 18A; Ex. D-3, pp. 32, 251, 254.
3.		Batteau.	John B. Fremont	1843	Exploring	Ex. P-8, p. 18A; Ex. D-3, pp. 93, 252, 254.
4.	Mud Hen	Skiff in wheels	Brigham Young	1848	Exploring	Ex. P-8, p. 18A; Ex. D-3, pp. 53, 54, 180.
5.	The Sally	Yawl	Howard Stansbury.	1850	Survey	Ex. P-8, p. 18A; Ex. D-3, pp. 5, 8, 22, 180, 260.
6.		Skiff	Howard Stansbury.	1850	Survey	Ex. P-8, p. 18A; Ex. D-3, pp. 8, 22.
7.	The Timely Gull		Brigham Young	1854	Transporting cedar, salt, flagging and cattle, and pleasure excursions.	Ex. P-8, pp. 2, 18A; Ex. D-3, pp. 24, 40, 180, 182, 183, 229, 272.
8.	Deseret	Sail Boat	J. Cowdy	1855	Pleasure excursions	Ex. P-8, p. 2.
9.		Rowboat	Brigham Young	1856		Ex. D-3, pp. 38, 229.
10.	Eureka	Sloop	David L. Davis	1865	Pleasure, Surveying	Ex. P-8, pp. 20, 23B, 23D, 24, 25, 27.
11.		Sailboat	Walker Brothers	1860's	Pleasure	Ex. P-8, p. 18A; Ex. D-3, pp. 75, 102, 188, 209.
12.		Yacht	Elbert Eastam, Ben Hampton.	1867		Ex. D-3, p. 57.
13.	Star of the West	Schooner	John B. Meredith.	1867-1868	Carrying salt; Supplying Survey party.	Ex. P-8, p. 18A; Ex. D-3, pp. 56, 140, 189.
14.		"Boat"	W. D. Williams	1869		Ex. D-8, p. 20.
15.	Pioneer	Flat-bottomed Sail boat.	Patrick Connor	1867 or 1868	Carrying railroad ties	Ex. P-8, p. 236, Ex. D-3, pp. 140, 190.
16.	Kate Conner	Steamboat	Patrick Connor	1868	Carrying railroad ties and telegraph poles.	Ex. P-8, pp. 17, 18A, 23C; Ex. D-3, pp. 69, 75, 190, 192, 245, 254.
17.	Pluribustah	Schooner	Patrick Connor	1869		Ex. P-8, p. 18B; Ex. D-3, pp. 75, 102, 190, 219.
18.		Raft of railroad ties		1868-9	Transporting railroad ties	Ex. P-8, p. 2B; Ex. D-3, p. 191
19.	City of Corinne (Name changed to General Garfield in 1875).	Steamboat		1871	Carry ore	Ex. P-8, pp. 3, 4, 5, 23C, 26C.
				1872-1881	Excursion	Ex. D-3, pp. 25, 74, 75, 88, 163, 193, 206, 207, 229, 244, 253, 254.

20. The Lady of the Lake	Steamboat	John W. Young	1871	Pleasure	Ex. P-8, p. 18A; Ex. D-3, pp. 75, 88, 209.
21. Water Witch	Yacht	Salt Lake Yacht Club.	1875-1880	Pleasure cruises	Ex. P-8, pp. 20, 23C, 23D, 26A; Ex. D-3, pp. 26, 80, 225.
22. Cambria	Catamaran	Capt. Davis	1877	Pleasure cruises	Ex. P-8, pp. 20, 21, 22, 23D; Ex. D-3, pp. 80, 135, 141, 201, 210.
22. Mary Askie	Yacht	Silver Brothers	1877-1880	Recreation	Ex. P-8, pp. 24, 26A; Ex. D-3, p. 80.
24. Petrel	Yacht	Capt. Barratt	1882	Recreation	Ex. P-8, pp. 21, 24, 26A; Ex. D-3, p. 80.
25. America	Yacht	Capt. Hudson	1870's	Recreation	Ex. P-8, pp. 24, 26A, 26B; Ex. D-3, p. 80.
26. Maud	Yacht	Adam S. Patterson.	1880	Recreation	Ex. P-8, p. 18A; Ex. D-3, pp. 80, 135, 201.
27. Pinafore	Yacht	Salt Lake Yacht Club.	1880	Opera	Ex. P-8, p. 23D; Ex. D-3, p. 80.
28. Esther	Boat	Capt. Davis		Excursions	Ex. P-8, pp. 18A, 30.
29. Whirlwind	Steamboat	Capt. Dahl	1884, 1887	Excursions	Ex. P-8, pp. 26C, 26D; Ex. D-3, pp. 88, 207, 229.
30. Susie Riter	Steamer	Capt. Douris	1886	Excursions	Ex. P-8, p. 21; Ex. D-3, pp. 97, 207.
31. Eloise Sherman	Propeller		1889	Excursions	Ex. D-3, p. 98.
32. Lady of the Lake (Boat later sold to Judge Wenner, who changed name to "Argo".)	Sailboat	Jacob Miller	1884	Hauling sheep, etc.	Ex. P-8, pp. 16A, 16B, 13C, 16D, 17, 18A; Ex. D-3, pp. 132, 141, 198, 229, 2
33.	Sloop Schooner	Millers			Ex. P-8, p. 16A; Ex. D-3, p. 236.
34.	Schooner	Millers		Hauling salt	Ex. P-8, pp. 16D, 23C.
35.	Flat boat	White & Sons	1884	Hauling cattle, Pleasure	Ex. P-8, pp. 15, 16D, 39A; Ex. D-3, pp. 229, 233; Tr. pp. 219-229.
36.	Scow	George Frarey	1895-1903	Hauling cattle, Excursions	Ex. P-8, p. 18B; Ex. D-3, pp. 195, 196; Tr. p. 225.
37.	Sheep boat	Jake Winters		Hauling sheep	Ex. D-3, p. 229.
38. Lilly of the Lake		George Payne			Ex. D-3, p. 229.
39. Cambria II	Catamaran	David L. Davis	1891	Pleasure and Excursions	Ex. P-8, pp. 18A, 23D; Ex. D-3, p. 142; Tr. p. 76.
40. Hope		Alfred Larabourde.	1895		Ex. P-8, p. 18A; Ex. D-3, p. 203.
41. The Promontory	Steamboat	Southern Pacific Railway.	1902	Construction of Lucin cut-off.	Ex. P-9, pp. 10, 13.
42. Lucin					Ex. P-8, p. 21; Tr. p. 241.

	Name of Boat	Type of Boat	Owner or User	Date of Use	Purpose	Reference
43.	Augusta	Launch	Southern Pacific Railway.	1908	Patrol the Lucin cut-off	Ex. P-8, p. 18A; Ex. D-3, pp. 134, 204.
44.	E. W. Marsh		Southern Pacific Railway.		Patrol the Lucin cut-off	Tr. p. 96.
45.	Old Salt Lake		Charles & John Beckman.	1903	Hauling sheep	Ex. D-3, p. 229; Tr. pp. 227-229.
46.	Seagull			1903	Excursions	Tr. p. 47.
47.	Alice Ann			1907	Excursions	Tr. p. 84.
48.	Ruth	Tugboat	John Dooley	1914-1920	Haul cattle	Ex. D-3, p. 236; Tr. pp. 85-87, 89, 93-96, 100.
49.	Old Bob	Cattle boat			Haul cattle	Ex. D-3, p. 229.
50.	Vista	Steamer		1909	Excursions	Ex. P-8, pp. 23D, 34A, 34B, 34C; Tr. pp. 87, 88.
51.	Irene			1909	Excursions	Ex. P-8, pp. 24D, 34B, 34C, 34D; Tr. p. 87.
52.		Launch	Saltair Beach Company.	1909	Pleasure	Ex. P-8, p. 34A.
53.	Victory	Launch	W. H. Parker	1909	Recreation	Ex. P-8, pp. 34C, 34D.
54.	Cozy		Blair Richardson	1909	Recreation	Ex. P-8, p. 34D.
55.	Rescue		Larson		Recreation	Ex. P-8, p. 34D.
56.	Firefly		Capt. Newman		Recreation	Ex. P-8, p. 34D.
57.	Galilee		Capt. Ralph Brown.		Recreation	Ex. P-8, p. 34D.
58.		Launch		1920		Ex. D-3, p. 238.
59.		Propeller				Ex. D-3, p. 238.
60.		12 boats	Capt. Edwin G. Brown.	1937	Recreation	Ex. P-8, p. 31.
61.			Salt Lake County Sheriff's office.	1935	Patrol lake	Ex. P-3, p. 173; Tr. p. 105.
62.		Sheep Barge	Dick Stoddard	1940's	Haul sheep	Tr. pp. 70, 72, 102.
63.		Miscellaneous boats	Sunset Beach Resort.	1934-1968	Excursions	Tr. pp. 111-122.
64.		Chris-Craft	Sunset Beach Resort.		Excursions	Tr. p. 113.
65.			Donald Newhouse.		Excursions	Tr. p. 113.

66.	LCI		1947–1955	Haul guano	Tr. pp. 117, 123.
67.	39 boats	Southern Pacific Company.	1959	Construction of causeway across Great Salt Lake.	Tr. pp. 149, 152, 176, 177, 188, 199, 202.
68.	3 Amphibious boa's, 2 Launches.	John Clawson Silver.	1963–1967	Excursions	Tr. pp. 288, 289.
69.	Chriscraft	John Clawson Silver.		Publicity	Tr. p. 289.
70.	Barge	John Silver		Carry salt crystals and rock "for decoration and pleasure".	Tr. p. 289.
71.	3 Air boats	Sanders Brine Shrimp Company.	1967	Harvesting shrimp	Tr. pp. 1–8, 160.
72.	Boat	Sanders Brine Shrimp Company.		Harvesting shrimp	Tr. p. 158.
73.				Regatta	Ex. P–26, P–27, P–28; Tr. p. 211.
74. Gilbert	13-ton vessel	State of Utah Geological and Mineralogical Survey.	1969	Scientific investigation	Ex. P–14; Tr. pp. 139, 140, 144, 145, 147.
75. Clyman	Chriscraft	Utah State Geological and Mineralogical Survey.	1969	Scientific investigation	Ex. P–14; Tr. pp. 139, 145, 147.
76.	3 Amphibious trucks or "ducks".	Utah State Geological and Mineralogical Survey.	1969	Scientific investigation	Ex. P–14; Tr. p. 139.
77.	Crash boat	Hill Air Force Base.	1969	Rescue operation	Tr. p. 132.

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APPENDIX 4

The vessels listed in Appendices 2 and 3, may be placed into eight categories, depending upon the uses to which they were put. The following table lists the eight categories, and indicates, by references to the Item numbers used in Appendices 2 and 3, the categories into which the vessels fall.

I—Pleasure and Recreation

10, 11, 20, 21, 22, 23, 24, 25, 26, 27, 28, 52, 53, 54, 55, 56, 57, 60, 73.

II—Excursion Boats

8, 29, 30, 31, 39, 46, 47, 50, 51, 63, 64, 65, 68.

III—Transporting Sheep and Cattle

35, 36, 37, 45, 48, 49, 58, 62.

IV—Railroad Construction and Maintenance

41, 42, 43, 44, 67.

V—Exploration and Scientific Studies

1, 2, 3, 4, 5, 6, 74, 75, 76.

VI—Commercial Trade or Travel

7, 15, 16, 18, 19, 32, 34.

VII—Miscellaneous Uses

9, 13, 61, 66, 69, 70, 71, 72, 77.

VIII—Unknown Uses

12, 14, 17, 33, 38, 40, 59.

APPENDIX 5

Comments on and Corrections of the State of Utah's Summary of Evidence

1. Paragraph (c) of the summarization of the testimony of Zillah Walker Manning (Br. 16) is:

> c. She remembered that a harvester, requiring 12 horses to pull it, was taken to the island by boat (T. 222); and that grain raised on the island was shipped by boat, "lots of times", about twice a week in the summertime and once a month in the winter (T. 223).

The reference to this transcript shows that Mrs. Manning said two separate things, first, that she saw grain shipped on her father's boat "lots of times," (Tr. 223, line 9), and second, that her father operated the boat twice a week in the summertime, and sometimes once a month in the wintertime (Tr. 223, lines 16 and 18). But Mrs. Manning did not say that grain was shipped twice a week in the summer and once a month in the winter.

2. Paragraph (f) of the summarization of the testimony of Leon L. Imlay (Br. 18) is:

> f. Beginning in 1928, as an employee of the Royal Crystal Salt Company, he was assigned the responsibility of operating the pump station owned by that company and located near Saltair Resort, and used to pump lake brines to evaporation ponds for production of commercial salt; he was in charge of the pump station for about 11 years, or until 1939; during this period he visited the pump station one or two days each week, the pump station being located in water about 8 feet deep; during these visits

> he would see a number of boats, ranging in size from "tiny" boats to large power boats; and, in fact, he and his crew always had to use boats to operate the pump station, carrying crewmen, gasoline for the pump, fresh water and general supplies (Tr. 68–69, 73).

The summary fails to mention that from 1917 to 1939 Mr. Imlay worked for three or four different salt companies on or near the shores of Great Salt Lake, and that during all of this time all of the salt produced by these companies was sent to market by rail (Tr. 73, lines 19 to 25; Tr. 74, lines 1 to 16).

3. Paragraph (a) of the summarization of the testimony of Francis W. Kirkham (Br. 21) is:

> a. He was born in 1877, nine years before Utah's statehood; was familiar with the boating activities at Garfield Beach before statehood; was a paying passenger on the excursion boat pictured on page 12 of Exhibit P–8; and the firsts such trip that he took was before 1896 (T. 233–35).

It is noteworthy that Dr. Kirkham, who was 92 years old at the time of the hearing, and had lived in the area almost all of his life, had never gone to Great Salt Lake for any reason other than recreation.

4. Paragraph (b) of the summarization of the testimony of Phil Dern (Br. 21) contains a minor inaccuracy:

> b. Every year from 1934 to the present time Sunset Beach has operated boats for hire, usually on a concession basis whereby Sunset Beach receives a percentage of the gross income from boat rides and rentals, which percentage now approximates $10,000.00 per year (T. 112); the average boat would carry 12 to 15 passengers, although the present concessionaire (John Silver) also uses several larger amphibious "army ducks" (T. 113).

The word "present concessionaire (John Silver)" suggest that the beach is currently operating, with John Silver as a concessionaire; actually, the beach did not open in 1968 (Tr. 114, line 13) and the testimony with respect to Mr. Dern's plans to obtaining a concession at the new Antelope Island State Park (Tr. 114, lines 18 to 25) suggests that the beach had not been in use in 1969 up until and including the time of the hearing in this matter. And Mr. Silver's testimony shows that while he used to be a concessionaire at Sunset Beach, he now has his own Silver Sands Beach (Tr. 287, line 22; Tr. 288, lines 1 and 2).

5. Paragraph d of the summarization of the testimony of Harold J. Tippets (Br. 24) is:

> d. The State of Utah, Salt Lake County and Hill Air Force Base own and operate rescue craft on the lake (T. 132).

What Mr. Tippets actually said is that the State has craft which *will be* on the Lake; that county Sheriff offices *have been* involved in rescue operations on the Lake, and that Hill Air Force Base has one crash boat (Tr. 132, lines 16 to 25). But he did not say, as the summary suggests, that any of these organizations *presently have* craft on the Lake.

6. Paragraph (e)(1) of the summarization of the testimony of Thomas T. Lundee (Br. 26) is:

> e. The Great Salt Lake was particularly economical for navigation, because:
> (1) The water did not freeze in winter and the causeway fleet operated day and night, six or seven days a week, twelve months a year (T. 177);

The summary is correct (although the reference to the Lake's not freezing is on page 172 of the transcript), and doubtless when the Lake is as low as it

was in 1957 to 1959, the higher salt concentration then existing would make the formation of ice an extremely rare phenomenon. However, in past years, when the level of the Lake has been higher, ice has been a menace to the few boats on the Lake. In Plaintiff's Exhibit 8, on page 21, appears this entry in the Journal of Captain David L. Davis:

> November, 1882. 16th to 20th was caught out in an ice flow on the great Salt Lake. The circumstances were these: The "Cambria" was blown out from her anchorage at Lake Shore by a hurricane. J. F. Hardie and myself went in search of her in the "Petrel." We found her still anchored to about 300 feet of railroad iron within 3 or 4 miles to the south end of Antelope Island. On our way out we met some ice but had no trouble getting through. We captured a muged goose, and placed him in the forepart of the boat.
>
> Coming home Hardy in "Petrel" and myself in "Cambria," we struck hard ice about three miles off Lake Shore and was stuck fast about 500 yards apart. We had no bedding nor food of any kind, and for two days I had no food or water except what ice I melted and that was so salty it made me vomit. We landed in the afternoon of Sunday at the Day farm in Kaysville having drifted some 8 or 10 miles with ice field since Thursday when we stuck. This was my **worst trip on the lake.**

And some time before, Christopher Layton, who had purchased the "Kate Connor" to use for transporting sheep to and from Antelope Island for the Mormon Church, had had a similar experience in that boat (Ex. D–3, p. 70):

> I had charge of the sheep and island for five years, and we had many exciting adventures and also some accidents, but no lives were lost and many are the good pleasant times we had.

> At shearingtime our girls and boys, with one of my wives to take charge of affairs, would go over to the island. Also at haying time the young folks enjoyed the pleasure of these trips. On one occasion we were bringing a load of fat sheep to Salt Lake for mutton, when the boat was caught in the floating ice, which, coming from Bear River and Jordan River, had met and formed a jam, from which we were unable to extricate ourselves for forty-eight hours. The pounding of the ice on the sides of our boat caused it to leak. We all united in calling upon the Lord in our extremity, and my wives and children, who were on shore and could see our peril, also prayed for help. A wind arose which drove the ice away, so we were enabled to reach shore, although we were obliged to go back to the island first. Then the next morning, the ice being gone, we easily crossed and were received with much rejoicing by those dear ones who had been so anxious for our safety.

Thus, ice and frozen waters are not altogether unknown to Great Salt Lake.

7. The first clause in paragraph (e) (3) of the summarization of Mr. Lundee's testimony (Tr. 27) is:

> (3) The greater buoyancy of the waters of the Great Salt Lake made navigation more economical than navigation on other inland waters or oceans because there is at least a 20% bonus in carrying capacity (T. 171):

But, as an excerpt from other evidence in the record shows (Ex. D-3, pp. 29—30), this additional buoyancy is a mixed blessing:

> Owing to the density of the waters of the lake, boats that ordinarily would sink to the water line of the boat in fresh water, rode so high as to make them top-heavy in the salty wa-

ter. Even a moderate disturbance gives to the shore breakers prodigious power and the waters become very buoyant. When there is an unusual disturbance they become most destructive, but when a tornado hits the lake it is simply irresistible. With these facts in mind one can readily understand why boats of the lake were so easily lashed to pieces.

8. Paragraph (c) of the summarization of the testimony of Gail Sanders (Br. 29) is:

> c. The company uses three air boats 18 feet long and 6 feet wide (each capable of carrying about 1,200 pounds of adult shrimp) (T. 158-59); other boats have been used in the past, but the air boats are preferable because they can operate in any depth of water (T. 158).

The paragraph may be read as suggesting that air boats were required because the water was deep; the transcript shows that the air boats were required because the water was shallow (Tr. 158, lines 21 to 25).

9. Paragraph (c) of the summarization of the testimony of Elmer Butler (Br. 33) is:

> c. He also testified that he was familiar with the lake and was aware of the dolomite deposits near the lake which were shipped to the Geneva Plant of U.S. Steel for use as a flux, and that he worked at the dolomite mine as a boy (T. 261); that he was aware of "very valuable deposits" of dolomite sands on Stansbury Island which could only be shipped by boat during "expected" high cycles of the lake level (T. 262); that he was aware of valuable guano deposits shipped from Gunnison Island and Hat Island (T. 262); and knew that the livestock on Fremont Island could only be shipped by boat "or

helicopter" and that the livestock on Antelope Island, during high water levels, could only be shipped by boat (T. 263–64).

It is well that the word "expected" is in quotation marks, for the transcript reveals that the person who expects the Lake to rise again is the sanguine attorney for the State of Utah who examined the witness, and not the witness himself (Tr. 262, line 7).

10. The first of the summaries of the exhibits requiring comment is P–7, which is described (Br. 34) as

> P–7 Early 1871 mining map showing lake and location of General Connor's steamship routes on the lake (T. 32).

The description is accurate; what we wish to point out is that General Connor's one steamboat, the *Kate Connor,* was no longer owned by him in 1872—one year after the date of the map. (And, as we have noted, there are many allusions in the evidence to the sinking of this boat in 1871.) Whether his two other boats, the "Pioneer" and the "Pluribustah," were still on the lake in 1871, and under his control, is unknown.

11. Page 2A of Exhibit 8 (Br. 34) is described as

> Page 2–A Account of large shipments of railroad ties on the lake in 1869.

The words "shipments" should be singular; it is an account of one shipment only, and, as a matter of fact, there was only one such shipment in the history of the Lake. Ex. D–3, p. 191.

12. The summary of page 2–B of Exhibit 8 (Br. 34) is:

> Page 2–B Account of the late 1860's and early 1870's where steamboats shipped "great quantities of ore" from south end of lake to northeast part

of lake, and excursion boats capable of carrying 300 passengers.

What Mildred Mercer actually wrote in this account was, first, that "the Tooele county mines were producing great quantities of ore" and second, that "a steamboat, *City of Corinne*, had been built to haul ore and passengers from a spot near Black Rock to Corinne, across Great Salt Lake." Both of these statements are correct: great quantities of ore were produced, and the steamboat was built to carry them. But Mrs. Mercer to her credit did *not* say that the steamboat actually carried great quantities of ore, or any quantities of ore, and as we have seen from our review of the evidence, the steamboats on the Lake, although built to carry ore, were soon diverted to other uses.

13. The summarization of pages 3 to 5 of Exhibit 8 (Br. 34 and 35) is:

> Pages 3–5 Newspaper advertisements in 1875 and 1876 promoting commercial passenger service on ship "General Garfield." The advertisements also reflect the variety and volume of commercial shipments, e.g., on page 4: "On and after August 1st the regular rates on Ore, Bullion, Coke, Charcoal and Coal will be $2.15 per ton between Salt Lake City and Halfway House in lots of not less than 12,000 lbs. loaded and unloaded by the company, and $2.00 per ton when not loaded or unloaded by the company. Freight for the west will be received on weekdays only from 7 a.m. to 10 a.m. and forwarded the same day, while that received from 10 a.m. to 6 p.m. wil [sic] be forwarded the next day. For any further information concerning freight, apply to J. N. Pike, Gen'l Freight Agent, G. W. Thatcher, Gen'l Passenger Agent, H. P. Kimball, Gen'l Superintendent."

The State's summarization of the document which constitutes page 4 of Exhibit 8 is grossly misleading, as can be determined by even the most casual examination of the document itself, which is an advertisement placed by the Utah Western Railway; the rates given for the transportation of freight are rates for transportation *by train* from Salt Lake City to Halfway House, and the rates are given in terms of *car lots* which is, of course, a term having a special meaning for the freighting of goods by rails. The word "car" in the phrase "car lots" is omitted from the State of Utah's purported quotation of the advertisement.

It is clear from the advertisement appearing on page 5 of Utah's Exhibit 8 that Halfway House was not a stop on the Lake, but a stop some distance from the Lake, and that the stop on the Utah Western Railway's line where the connection with the steamer was made was at Lake Point. It should also be noted that the connection with the steamer was not to permit passengers to continue on their trip to some destination, but only to afford them the opportunity of taking an excursion on the Lake "returning in time for the train arriving at Salt Lake City at 7 p.m." It is equally clear, from the fact that no rates are quoted for freight only to Lake Point, that Lake Point in fact was not a place where freight was loaded or unloaded onto the train. Indeed, that the train carried "Ore, Bullion, Coke, Charcoal and Coal" undoubtedly explains to some extent why there was not any significant carriage of freight on the Lake.

14. Utah's characterization of page 9 of its Exhibit 8 (Br. 35) continues this misconception; the State says page 9 contains:

> Page 9 Photographs of steamship "General Garfield" and shipping dock at Halfway House near Lake Point.

To the extent that there is an identification of the place where the photographs on page 9 of Exhibit 8 were taken, the pictures are clearly shown to have been taken at Lake Point, which is, of course, where the excursionists transferred from the railroad to the boat. There is no reference anywhere in evidence which would put the site depicted in the photograph at Halfway House—Halfway House being, as page 3 of the Plaintiff's Exhibit 8 shows, the place where the train connected with the Stages for Stockton, Ophir and Dry Canyon, and where the freight was transferred to the Stages. Thereis no explanation in the State's brief of the identification of these pictures as having been taken at Halfway House; there is merely the bald assertion that these pictures show the General Garfield at Halfway House. The State has seriously erred in representing the evidence as showing the carriage by the General Garfield in 1875 of "Ore, Bullion, Coke, Charcoal and Coal."

15. Exhibit P–40 is described as a

> P–40 Contract showing present mining and removal of lime sand for flux from Stansbury Island on Great Salt Lake (T. 285).

The description is correct; the only point to be made here is that this "island" is actually, for the most part, and in fact, at the present time, a peninsula connected with the mainland (Ex. D–3, p. 171).

16. Two minor corrections in the descriptions of the Exhibits may also be noted: Exhibit P–2 (Br. 33) shows the levels of Great Salt Lake from 1850 to the present time; Exhibit D–2 (Br. 41) was not prepared by the United States Geological Survey, but by the Utah Geological and Mineralogical Survey.

APPENDIX 6

Contents of Defendant's Exhibit 3

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4. Gold Seekers on the Hastings Cutoff:
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5. Thrilling Experiences:
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6. History of Brigham Young—1847-1867:
   MassCal Associates, Berkeley, California- 50
7. The City of the Saints and Across the Rocky Mountains to California:
   Richard Francis Burton, London, 1861-- 58
8. A Journey to Great-Salt-Lake City:
   James Remy and Julius Brenchley, M.A., London, 1861---------- 65
9. Christopher Layton:
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10. Tourists' Guide Book to Salt Lake City:
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11. The Resources and Attractions of the Territory of Utah:
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13. Utah Gazetteer and Directory of Logan, Ogden, Provo and Salt Lake City, for 1884:
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14. Salt Lake City:
Salt Lake Chamber of Commerce, Salt Lake City, 1888---------- 90
15. Salt Lake City:
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16. The Resources and Attractions of Utah:
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17. A Complete and Comprehensive Description of the Agricultural, Stock Raising and Mineral Resources of Utah; Also, Statistics in Regard to its Climate, Etc.:
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18. A Complete and Comprehensive Description of the Agricultural, Stock Raising and Mineral Resources of Utah:
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19. Sights and Scenes in Utah for Tourists:
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20. The Wonderlands of the Wild West, With Sketches of the Mormons:
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25. The Mountain Empire Utah:
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26. Through the Heart of the Scenic West:
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27. Utah—Resources and Activities:
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33. East of Antelope Island:
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35. The Great Salt Lake:
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36. Stansbury's Survey of the Inland Sea:
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37. The Gentile City of Corinne:
Bernice Gibbs Anderson, Utah Historical Quarterly, Salt Lake City, Utah, 1941-- 267
38. Lake Bonneville:
Frederick James Pack, Ph.D., Salt Lake City, Utah, 1939---------- 273
39. Census of Population: 1960; The Eighteenth Decennial Census of the United States:
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APPENDIX 7

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Item B. Notice of Initiation of Investigation, Corps of Engineers, Sacramento, California, dated 15 Oct 69	1
Item C. Memorandum Report, Subject: Small Craft Harbor Great Salt Lake, Utah, dated 24 Jun 60	10
Item D. Analysis of Great Salt Lake National Monument Proposal	15
Item E. Letter to Secretary of Army from Sam Rayburn, Speaker of the House, dated Jul 28, 1951	1
Item F. Corps of Engineers Form 1118, dated 27 Jul 51, with accompanying papers:	
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Item I. Letter to Secretary of Army, dated Jul 17, 51, from Bureau of Budget	1

Item J. Letter to Secretary of Army dated 25 Jun 51 from Chief of Engineers, Subject: Great Salt Lake, at or near Garfield, Utah ---------- 2

Item K. Corp of Engineers form 1118, dated 20 Jun 51, with accompanying papers:

1. Letter to Bureau of Budget from Secretary of Army ---------- 1
2. Copy of letter, State of Utah to Office of Chief of Engineers, 5 Jun 51 (dup.) ---------- 1
3. Copy of letter, Department of Interior to Office of Chief of Engineers, 21 May 51 (dup.) -- 1

Item L. Letter, State of Utah to Chief of Engineers, dated June 5, 1951 ---------- 2

Item M. Return Receipt dated Apr 3, 1951, Form 3811

Item N. Letter to Brig. Gen. Chorpening, Assistant Chief of Engineers dated Apr. 3, 1951, from Senator Wallace F. Bennett ---------- 1

Item O. Letter to Chorpening, Assistant Chief of Engineers, dated Apr 2, 1951 from Senator Arthur V. Watkins ---------- 1

Item P. Memorandum to Chief, Civil Works Branch, Bureau of Budget, dated 28 Mar 1951, from W. D. Milne, Lt. Col., Corps of Engineers, Subject: Preliminary examination and survey of Great Salt Lake at or near Garfield, Utah ---------- 1

Item Q. Letter to Congressman Reva Beck Bosone, dated 28 Mar 1951, from Assistant Chief of Engineers Brig. Gen. Chorpening ---------- 1

Item R. Letter to Congressman Bennett, dated 28 Mar 1951, from Assistant Chief of Engineers ---------- 1

Item S. Letter to Congressman Watkins, dated 28 Mar 1951, from Chief of Engineers 1

Item T. Letter to State Engineer Linke, dated 28 Mar 1951, from Chief of Engineers 1

Item U. Letter to Division Engineer, San Francisco, California, dated 28 Mar 1951, subject: Preliminary examination and survey of Great Salt Lake, at or near Garfield, Utah, from Milne, Lt. Col., Corps of Engineers---------- 1

Item V. Letter to Secretary of Interior, dated 28 Mar 1951, from Chief of Engineers 1

Item W. Memorandum to Chief of Engineers, dated 23 Mar 1951, from Corps of Engineers, Sacramento, California--- 1

Item X. 3rd Indorsement to Chief of Enginers, dated 2 Feb 51, from Major General Bragdon ---------- 1

Item Y. 1st Indorsement to Chief of Engineers, dated 25 Oct 50, from J. S. Seybold, Colonel, Division Engineers---------- 1

Item Z. Memorandum to Division Engineer, Oakland, California, dated 18 Aug 50, from Lt. Colonel Milne---------- 1

Item AA. Public notice relative to Survey Report for navigation boat harbor on Great Salt Lake near Garfield, Utah, dated 8 Nov 1950---------- 1

Item BB. List of interested parties to whom Division Engineer's public notice is being furnished on Survey Report for navigation on Great Salt Lake, boat harbor at or near Garfield, Utah ---------- 6

Item CC.	Letter to Senator Thomas, dated 25 Oct 1950, from Colonel Seybold, Division Engineer	1
Item DD.	Letter to Division Engineer, Oakland, California, dated 18 Aug 1950, from Lt. Colonel Milne, Corps of Engineers	1
Item EE.	1st Indorsement to Chief of Engineers, dated 2 Jun 49, from Colonel Elliott	1
Item FF.	Memorandum to Chief of Engineers, dated May 9, 1949, from J. T. Murphy, Captain, Corps of Engineers, Executive Assistant, Subject: Survey Report for Navigation, Boat Harbor on Great Salt Lake near Garfield, Utah	1
Item GG.	Draft public notice relative to Survey Report for navigation boat harbor on Great Salt Lake near Garfield, Utah, undated	2
Item HH.	Memorandum to Chief of Engineers, dated 18 Mar 1949, from Colonel R. H. Elliott	1
Item II.	2nd Indorsement, dated 14 Sept 49, to Division Engineer, Oakland, California, from Corps of Engineers	1
Item JJ.	1st Indorsement, dated 24 Aug 1948, to Chief of Engineers, from Colonel Elliott	1
Item KK.	Letter to Chief of Engineers, dated 20 Aug 48 from Colonel Gorlinski, District Engineer	1
Item LL.	2nd Indorsement to Division Engineer, Oakland, dated 21 May 48, from Lt. Colonel Jewett, Corps of Engineers	1

Item MM. Letter to Chief of Engineers, dated 16 May 48, from H. D. G. Baxter, Acting Chief, Engineer Division---- 1

Item NN. Transcript of Public Hearing held at 27 Apr 1948, from Colonel Gorlinski, District Engineer---------- 1

Item OO. Survey Report from Navigation Boat Harbor on Great Salt Lake near Garfield, Utah, dated April 1, 1949-- 24

Item PP. Letter to Assistant Attorney General, Land and Natural Resources Division, dated 9 May 1968, from Colonel Young, District Engineer, Sacramento, California---------- 1

Item QQ. Letter to Chief of Engineers, dated Salt Lake City, Utah, by the War Department for the purpose of considering the advisability of providing a harbor for light-draft vessels on Great Salt Lake, near Garfield, Salt Lake County, Utah, Wednesday, 10 Jul 1946, 2:00 o'clock P.M.-- 43

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